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FEDERAL RESERVE'S FIRST MONETARY POLICY REPORT FOR 2005

HEARING

BEFORE THE

COMMITTEE ON BANKING, HOUSING, AND URBAN AFFAIRS UNITED STATES SENATE

ONE HUNDRED NINTH CONGRESS

FIRST SESSION

ON

OVERSIGHT ON THE MONETARY POLICY REPORT TO CONGRESS PURSUANT TO THE FULL EMPLOYMENT AND BALANCED GROWTH ACT OF 1978

FEBRUARY 16, 2005

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C O N T E N T S

WEDNESDAY, FEBRUARY 16, 2005

WITNESS

Additional Material Supplied for the Record

FEDERAL RESERVE'S FIRST MONETARY POLICY REPORT FOR 2005

WEDNESDAY, FEBRUARY 16, 2005

U.S. SENATE,
COMMITTEE ON BANKING, HOUSING, AND URBAN AFFAIRS,
Washington, DC.

The Committee met at 10:02 a.m., in room SD–G50, Dirksen Senate Office Building, Senator Richard C. Shelby (Chairman of the Committee) presiding.

OPENING STATEMENT OF CHAIRMAN RICHARD C. SHELBY

Chairman SHELBY. The hearing will come to order. We are very pleased this morning to welcome Chairman Greenspan before the Senate Banking Committee to testify on the Federal Reserve's Semi-Annual Monetary Policy Report to the Congress.

Chairman Greenspan, at its meeting earlier this month, the Federal Open Market Committee, FOMC, raised its target for the Federal funds rate by 25 basis points to 2.5 percent, the sixth increase since June 2004, when the FOMC began raising the target rate from a low of 1 percent. The FOMC has been consistent in noting that its policy is one of accommodation and that changing the accommodative stance will be done in a "measured" fashion.

The U.S. economy, I believe, has responded well, in turn, with a continuing expansion. Real GDP increased 3.1 percent in the fourth quarter of 2004. We can now also point to a strong job growth with payroll employment increasing at an average of 181,000 jobs per month in 2004. On the unemployment front, the unemployment rate decreased to 5.2 percent in January, falling half a percentage point from the previous January.

This morning, we will have ample opportunity to discuss in greater detail the Federal Reserve's performance in carrying out monetary policy and its views on the future direction of our Nation's economy. I look forward to raising a number of issues during our discussion.

Mr. Chairman, again, we are pleased to have you with us, and we look forward to discussing with you the necessary actions we must take to ensure that our economy grows and prospers in the coming years.

Senator Sarbanes.

STATEMENT OF SENATOR PAUL S. SARBANES

Senator SARBANES. Thank you very much, Chairman Shelby. I am pleased to join you in welcoming Chairman Greenspan before the Committee on Banking, Housing, and Urban Affairs this morn-

ing to testify on the Federal Reserve's Semi-Annual Report to Congress on Monetary Policy.

Chairman Greenspan's testimony on the Fed's monetary policy report is always widely anticipated by the Congress, the press, the financial markets, and the public, as witness the large crowd in this room this morning. In addition, I believe this is Chairman Greenspan's first testimony this year before any Committee of Congress. So, I suspect that that heightens the expectation.

The Federal Reserve Act requires the Board of Governors to submit a report to Congress by February 20 and July 20 of each year on the conduct of monetary policy. It also requires the Chairman of the Federal Reserve to testify before the Congress on both of those reports.

Chairman Shelby, I would like, at the outset, to take note of a decision announced by the Federal Open Market Committee, on December 14, to expedite the release of the minutes of the FOMC meetings. Beginning with the December 14 meeting, the minutes of regularly scheduled meetings will be released 3 weeks after the date of the policy decision, as I understand it. The previous policy was to release minutes of the FOMC meeting after the next FOMC meeting, usually a period of 6 weeks or more.

This move is consistent with previous actions by the Federal Open Market Committee to announce its policy decisions immediately after its meetings to provide some explanation of the basis for the decision in the announcement. In my view, greater transparency in the FOMC's decisionmaking process is of great benefit both to the operations of the market and to the public. This is an effort which Chairman Greenspan has led during his tenure, and I think it constitutes an important legacy at the Federal Reserve and, Chairman Greenspan, I commend you and your colleagues for this most recent step.

Chairman Shelby, I listened to your review of the economy, and it all goes to show whether the glass is half-full or half-empty and how you perceive it. Because I, actually, have concerns about——

Chairman SHELBY. We are trying to fill it up.

[Laughter.]

Senator SARBANES. Yes. —the outlook for the U.S. economy and, therefore, about our current monetary policy, and I want to raise those just briefly this morning.

As you noted, the Federal Open Market Committee raised the Federal funds rate another quarter of a point at its last meeting. This was the sixth consecutive quarter-point increase by the FOMC in less than 8 months. It has now gone from 1 to 2.5 percent. It seems to me that, while the Federal Open Market Committee apparently feels that this pace can be continued, I think there is some cause for concern. The GDP growth in the fourth quarter actually slowed to 3.1 percent, well below the rate most experts consider our potential growth rate.

In my view, the labor market remains relatively weak. Employers added 146,000 payroll jobs in January, 157,000 in December, 137,000 in November, all of which are just about enough to keep pace with population growth.

Now, while the Labor Department reported last week that the unemployment rate dropped in January to 5.2 percent, from 5.4

percent in December, it was mostly because of a decline in the number of people looking for work. In fact, most of the decline in the unemployment rate over the last year occurred because of a decline in the share of people looking for work not because of a higher share with jobs. Capacity utilization in our Nation's factories remains at low levels. In fact, figures were released this morning that capacity utilization fell to 79 percent. December's level had been reported as 79.2 percent, but had been revised downward by a tenth of a point. Wages are rising more slowly than inflation. The economy is still in the situation of three-quarters of a million fewer private-sector jobs than existed when President Bush took office over 4 years ago. Over 20 percent of those who are unemployed are long-term unemployed; in other words, have been unemployed for more than 26 weeks. This has been continuous now for the last 28 months, that more than 20 percent of the unemployed are long-term unemployed, which sets a record.

The Fed said, in its statement, "Inflation and longer-term inflation expectations remain well contained." Given this, it seems to me that the Fed should consider now taking a pause from its policy of interest rate increases to see how the economy develops in the first part of this year. Some expect that economic growth will slow and, given that, it seems to me worth considering, and I commended to the Chairman the possibility of pausing to survey where we are and assuring ourselves that the economy is, indeed, strengthening and can withstand continuing to raise interest rates. And I look forward to pursuing that with the Chairman in the course of his appearance here this morning.

Thank you very much, Mr. Chairman.

Chairman SHELBY. Thank you, Senator Sarbanes.

Senator Bunning.

STATEMENT OF SENATOR JIM BUNNING

Senator BUNNING. Thank you, Mr. Chairman. I appreciate you coming, Chairman Greenspan, for your second-to-last Federal Reserve Semi-Annual Monetary Report. Though some may not believe this, I really do appreciate you coming up here. I am sure coming up here is like going to the dentist for you, and I am probably the dentist.

[Laughter.]

Your testimony is very important before this Committee, and we have a lot of people waiting with bated breath to hear your thoughts about the state of our economy. I hope I will be happy and the people whose lives can be directly affected by your comments are happy when this hearing concludes.

I, like most of the people in this room, will be paying particularly close attention to any insight you may give us about whether the FOMC will continue its current tack of "measured accommodation" of monetary policy. Of course, that is the $64,000 question, and I am sure you will do your best not to give us a hint of what the FOMC will do at its next meeting.

Once again, I will be asking about the persistence and presence of inflation in our economy, the same question I ask you every time you come before us to give your report. If you do not see any evidence of inflation, I would hope you would take that into account,

in a big way, during the next FOMC meeting. You do not have to raise rates just because many expect it. Low interest rates are not necessarily a bad thing.

I will take this opportunity to bring up one other pet peeve of mine, and I do it a lot. You will be asked a number of questions over the next 2 days that have nothing to do with your job. I know every time you come here, you are asked every question under the sun. Just remember, you do not have to answer those questions. You do not have to testify on subjects that are really not part of the Fed's jurisdiction. We will try to suck you in, but please do not succumb.

Once again, thank you, Chairman Greenspan, for coming before us today. I look forward to your response during the question and answer period.

Thank you.

Chairman SHELBY. Senator Reed.

STATEMENT OF SENATOR JACK REED

Senator REED. Thank you very much, Mr. Chairman, and welcome, Chairman Greenspan.

Four years ago, we found ourselves at a crossroads, and the Administration chose a path that led from record surpluses to record deficits, both in our fiscal accounts and our current accounts, our trade balance overseas, and much of that is being financed now by foreign central banks. And we have the opportunity, I would suspect, the obligation to try to change that course.

The Congressional Budget Office has estimated that the Federal budget deficit for fiscal year 2005 will be $368 billion. That does not include an $80-billion supplemental for Iraq and more than likely another $50-billion supplemental next year, given the troop sizes we will have in Iraq. It does not include cost of Social Security privatization, whatever they may be, and it does not include other operations. We have record deficits, stemming primarily from the tax cuts and from the steadily increasing spending for needed defense and homeland security measures.

Another aspect of the President's budget for 2006 is the cutting of numerous entitlement and domestic discretionary programs without effectively reining in the deficit. And many of these programs go to the heart of building human capital, the education system, and other systems that will, I think, over time help increase our productivity. And so we are dangerously underfunding those programs. Once again, there are major issues left out—the war in Iraq, alternative minimum tax reform, $1.6 trillion in extension of expiring tax cuts, and associated debt service. So this is a rather bleak picture of fiscal discipline.

You have reminded us already, Mr. Chairman, back in February 2002, that to the extent that we would be owing debt to other sovereign governments, in that respect there is a difficulty. We have a serious difficulty at the moment. You, also, state in April 2002, talking about current account deficits, countries that have gone down this path have invariably run into trouble, and so would we. Eventually, the current account deficit will have to be restrained, and no one is anticipating any restraint at the moment.

Now, given this context for important decisions, we are facing critical choices about extending on a permanent basis expiring tax cuts for wealthy Americans. We are, also, according to the President's Social Security, rather, contemplating borrowing trillions of dollars to create private accounts.

I am deeply concerned about the direction the President is taking in terms of our Nation's commitment to providing retirement security to the elderly and income security to disabled widows and surviving families. Many people do not recognize that about 30 percent of the recipients of Social Security are not the elderly, they are disabled or widows, or surviving families.

We all acknowledge that the long-term fiscal imbalance of the Social Security trust fund must be addressed. However, it is equally critical to recognize that the concept of private accounts being advanced by the President does absolutely nothing to address this imbalance. In fact, diverting payroll tax revenues exacerbates insolvency and accelerates the date of trust fund imbalance. Now, more than ever, Social Security occupies a critical role in ensuring this retirement is secure, especially at a time when the country is saving so little and fewer employers are offering the security of defined benefit pension plans. Defined benefit pension plans comprise 61 percent of all pension plans in 1980. By 2001, that number had dropped to 25 percent, and this trend is only further exacerbated by the solvency issues faced by the Pension Benefit Guarantee Corporation, which has been absorbing more failed employer-sponsored defined benefit plans.

So, Mr. Chairman, we have a serious set of issues before us and, as always, we look forward to your response to these issues.

Thank you very much, Mr. Chairman.

Chairman SHELBY. Senator Crapo.

COMMENTS OF SENATOR MIKE CRAPO

Senator CRAPO. Thank you very much, Mr. Chairman. Chairman Greenspan, we welcome you here again. I am not going to give a long opening statement. I am going to listen very closely to your comments. We are very interested in your discussion with us about the status and the prospects of the U.S. economy and whether it is the issue of tax policy or derivatives, as you know, is a very critical issue to me or Social Security or entitlement spending. I think that the issues that we are prepared to go into with you today are those on which you can provide us some very significant insight, and I look forward to it.

Thank you for coming.

Chairman SHELBY. Senator Schumer.

STATEMENT OF SENATOR CHARLES E. SCHUMER

Senator SCHUMER. Thank you very much, Mr. Chairman, and I, too, want to welcome my friend and someone who has been just a superlative Chairman of the Federal Reserve Board. He has a reputation—deserved—as a straight shooter and somebody who is really brilliant on monetary policy and economic policy. And that is why, when he comes here, we all want to ask him a whole lot of questions because we respect his judgment so.

My view, Mr. Chairman, is that if we left things to you, and I think the way you have handled monetary policy in the last few years has been excellent. I think the steps where the market has certainty and knows exactly what you are doing is a very good idea, provided the economy continues to move along at this pace—Senator Sarbanes mentioned that it may not—and then, of course, it would have to be reexamined.

Down the road, on Pennsylvania Avenue, we tend to mess things up. And I am truly worried about the debt, and particularly the added debt that Social Security could create in terms of the privatization of accounts. I think they are ideologically driven, frankly. I do not think they fall within the rubric of fixing Social Security, of, as I would call it, "mend it not end it." I think, rather, there are a group of people who want to prove that every Government program does not work and, therefore, they have come up with so-called "privatization." That is what they want to do is privatize. Now, they do not want to call it that because the public does not like it, but I think the name has stuck. The junk bond dealers tried to change the name of junk bonds for years, and they are still referred to as junk bonds 10 years later. I know they want them to call them high-yield bonds, but these personal accounts, there is privatization, and private accounts, and they are going to stick.

My view, you have been a strong voice for restraining our fiscal policies. We have disagreed on some of the tax cuts, but you have always talked about PAYGO, and you talked as early as 2001, I believe it was—it may have been 2000—of creating a glide path, which reduces the debt to as close to zero as possible. We had that under the Clinton years. We have lost it in the Bush years. My one criticism of your nonmonetary aspects of your policy is that you would speak out strongly, but I will be very interested in your views of privatization and whether the so-called "gain of privatization," having Joe and Jane Smith be able to manage a little bit of their own money in some kind of account, is equal to the huge amount of debt that it would throw on the shoulders of our already burdened Government.

We are giving a birth tax to every child born in America now of about $15,000. If we do all the things Senator Reed mentioned, that birth tax will double to $30,000, and I do not think that is good for the newborns. I do not think it is good for the economy, and I am interested in your views and hope you will give us a straightforward answer about the effects of privatization on debt.

Thank you, Mr. Chairman.

Senator Dole.

STATEMENT OF SENATOR ELIZABETH DOLE

Senator DOLE. Thank you, Mr. Chairman. Welcome, Chairman Greenspan.

Two weeks ago, when the Federal Open Market Committee raised its target for the Federal funds rate and the discount rate by 25 basis points, the release noted robust underlying growth and productivity, a gradually improving labor market and moderate growth in output. All of these, coupled with low inflation, appear to indicate a positive track for economic expansion in the coming years.

While these trends certainly are pleasing, I continue to be concerned about the slower pace of job creation. As you well know, the State of North Carolina has experienced dramatic losses in manufacturing employment. While the whole economy trends positively, we continue to focus special attention on those who lost their jobs due to the inability of their companies to compete with foreign firms that operate with dramatically lower-cost structures.

We must equip our Nation's poorest citizens with the necessary tools to take advantage of new jobs created by the expanding economy. To this end, I continue to make strengthening our community colleges a top priority.

I have spoken before about the work that Senators Enzi, Alexander, and I undertook last year. In addition to the President's $125-million proposal to establish a new community college access grant program, our bill provides increased assistance to our community colleges and other institutions of higher learning for training and retraining of students in high-growth job markets. I look forward to working again on this legislation with my colleagues in this session of Congress.

I, also, remained concerned about high energy prices, the rise in steel prices and the size of our trade deficit. In December, leaders in the City of Charlotte, North Carolina, and I were shocked to discover that the contracts for the South Corridor Light Rail construction came in at $30 million over estimates due to the increases in steel and concrete prices. It was explained that this dramatic rise in price was caused by China's growing demand for steel and concrete. Despite these concerns, though, I am confident that through increased trade, hard work, global communications, and continuing education of our workforce, we will achieve new levels of opportunity and global security for all Americans. I look forward to hearing from you on these and other matters, Chairman Greenspan.

Thank you for joining us today.

Chairman SHELBY. Senator Stabenow.

STATEMENT OF SENATOR DEBBIE STABENOW

Senator STABENOW. Thank you, Mr. Chairman, and welcome, Mr. Chairman. It is wonderful to see you, again, and I want to join my colleagues in thanking you for your leadership and service over the last 16 years. We truly have appreciated and relied on your judgments and your thoughts, and I have appreciated, also, the opportunity to talk with you both privately in my office, as well as on other occasions, about what we are facing in terms of out-of-control deficits.

I know you have warned us, since I was in the House of Representatives, and, by the way, I was very proud of the fact, coming into the U.S. House in 1997, that we balanced the budget for the first time in 30 years. We, unfortunately, now have gone from the largest surpluses in the history of the country projected in 2001 to the largest deficits, and that is deeply, deeply disturbing, and I am very interested in your current thinking as it relates to our economic environment with the deficit and the sustainability of that and, in fact, the ethic and responsibility that we all have to address that. I view that as a major moral issue.

The President would have us believe that Social Security, in 13 years, is going bankrupt even though we know that is not accurate. We do know that there is a gap, 40 or 50 years down the road, and I am confident that working with my colleagues that we will address that.

But what we are hearing from the President is that his suggestion as a way to fix it is to hoist an additional $5 trillion of national debt on American families over the next 20 years, and he calls it an ownership society. I would argue that what every man, woman and child will own is an additional $17,000 in debt, on top of what we already have as a birth tax right now of $15,000. Every time a child is born, that is our gift to them, in terms of the current national debt. So, I am extremely concerned about where we are going and the sustainability of that.

Right now, it will require decades for this debt to be fully offset, and the projected savings being talked about in terms of the savings and the market growth, in terms of privatization of Social Security, ironically, is the same growth that would take care of the Social Security gap if, in fact, it materialized. And so I would be interested in your thoughts about that as well.

I am very interested in your discussion in terms of the national debt, our chronic deficit and, also, what has been raised by my colleagues as troubling trade deficits, which are exploding, and particularly when we look at China and what is happening in terms of our inability to enforce trade laws and to address the trade imbalances that we have that are causing great havoc in my home State with manufacturers and others that are asking us for a level playing field so that they can keep and create more jobs.

So, I thank you, Mr. Chairman.

Chairman SHELBY. Senator Bennett.

COMMENTS OF SENATOR ROBERT F. BENNETT

Senator BENNETT. Thank you, Mr. Chairman. I am going to resist the urge to continue the debate that probably should take place on the floor and during morning business. But I think, perhaps, the opening statements are not the place to do that. So, I will simply pass and look forward to Chairman Greenspan's testimony.

Senator Bayh.

COMMENTS OF SENATOR EVAN BAYH

Senator BAYH. Thank you, Chairman Shelby. I was interested in Senator Bunning's dentist analogy. And not wanting to apply anesthetic to the patient, I will take a pass on my own remarks.

Mr. Chairman, I look forward to your comments about the critical issues that face us, and thank you for joining us today.

Chairman SHELBY. Senator Martinez.

COMMENTS OF SENATOR MEL MARTINEZ

Senator MARTINEZ. Mr. Chairman, thank you very much and, Mr. Chairman, thank you for coming this morning. It is great to see you, and I look forward to your remarks as well.

I do recall that we worked together on issues in my prior role, and I look forward to any comments you might make that would give encouragement to the housing market in America. I think that

in spite of what any might say of all Committees in this Senate, this Committee should be particularly keen on ownership, private investment and homeownership opportunities, all of which I think are seeing tremendous record successes in recent days.

And so I would look forward to hearing your comments, particularly with an eye toward those issues that might have impact on my home State of Florida, as well as something I care deeply about, which is homeownership, mortgage rates, and things of that nature.

So thank you, Mr. Chairman, for coming this morning.

Chairman SHELBY. Senator Dodd.

STATEMENT OF SENATOR CHRISTOPHER J. DODD

Senator DODD. Thank you, Mr. Chairman, and I will join my colleagues in welcoming you, Mr. Chairman. It is a pleasure to have you before this Committee again.

In the words of Morris Udall, "Everything has been said, but not everyone has said it," here this morning. So let me just associate my remarks, briefly, with those of Senator Reed, Senator Schumer, and Senator Stabenow. I know you are here to talk about monetary policy, but, obviously, because of the high regard in which we hold you and the tremendous respect we have for your knowledge about broader economic issues, while the subject matter is of monetary policy, obviously, these other issues are of keen interest to all of us here. I can recall only 4 years ago talking about we have not had hearings about the dangers of too steep a glide path on retiring the national debt. It sounds difficult to believe that only 4 years ago we had that hearing to talk about those issues.

Senator SARBANES. I remember it as though it was yesterday.

[Laughter.]

Senator DODD. But here we are in a very different situation, obviously. With estimates now, we have had to raise the debt ceiling twice in the last 3 years in excess of $8 trillion. I am worried, as well, about the amount of resources, the amount of this debt being held off-shore. And I know you have talked about that in the past, but the numbers seem to be going up. And the concern I see with some of these countries purchasing assets, not dollar-denominated assets, but looking more to the euro and whether or not we should be worried about that as a country, and so I will be looking forward to your comments on these matters that have been raised by others, and thank you again for your service.

Chairman SHELBY. Senator Corzine.

STATEMENT OF SENATOR JON S. CORZINE

Senator CORZINE. Thank you, Mr. Chairman, and I will join my colleagues in welcoming Chairman Greenspan. I truly want to congratulate and thank him for his service.

That said, we all have questions that most have already been talked about—the twin deficits, and I am anxious to hear your remarks and how and whether you believe we can have a smooth adjustment to dealing with them, particularly the trade deficit, which is shockingly large, at least from my perspective.

There are, also, some issues though that have not been mentioned, which I am personally quite concerned about. We have had

a stagnation of real wages in the country at least in the last 7 years, slow, absolute growth and what I believe will ultimately be a real problem for the country, a growing concentration of wealth and income disparity as revealed by statistics and share of population that is actually working is declining. There are a number of issues that deal with the health of our labor force and, ultimately, our broader economy that sometimes get pushed off of the discussion for good and proper reasons with regard to some of the major issues that we debate every day—trade and fiscal deficits and, God willing, some discussion on rational reform of Social Security.

So, I hope that we cannot forget that these underlying economic conditions have real impact on people's lives and the income disparity is growing in this country, and I am certainly anxious to hear the Chairman's views and suggestions on what maybe they need to do to try to at least moderate some of those trends.

Thank you, Mr. Chairman.

Chairman SHELBY. Chairman Greenspan, you proceed as you wish. Welcome, again, to the Committee.

STATEMENT OF ALAN GREENSPAN, CHAIRMAN BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

Chairman GREENSPAN. Thank you very much, Mr. Chairman and Members of the Committee.

I am, as always, pleased to be here today to present——

Chairman SHELBY. Would you bring the mike just a little closer to you. We have a huge audience here.

Chairman GREENSPAN. As usual, despite the fact that there is a DDS sign in front of the Committee, I, nonetheless, feel that it is a privilege to be here, as always, because I do find this an extraordinarily interesting discussion vehicle, and I trust that many of the issues will get clarified or, if not that, at least, the level of discussion will get heated sufficiently to engage us in considerable discussion, which I have a suspicion it may well.

In the 7 months since I last testified before this Committee, the U.S. economic expansion has firmed, overall inflation has subsided, and core inflation has remained low.

Over the first half of 2004, the available information increasingly suggested that the economic expansion was becoming less fragile and that the risk of undesirable decline in inflation had greatly diminished. Toward mid-year, the Federal Reserve came to the judgment that the extraordinary degree of policy accommodation that had been in place since the middle of 2003 was no longer warranted and, in the announcement released at the conclusion of our May meeting, signalled that a firming policy was likely. The Federal Open Market Committee began to raise the Federal funds rate at its June meeting, and the announcement following that meeting indicated the need for further, albeit gradual, withdrawal of monetary policy stimulus.

Around the same time, incoming data suggested a lull in activity as the economy absorbed the impact of higher energy prices. Much as had been expected, this soft patch proved to be short-lived. Accordingly, the Federal Reserve has followed the June policy move with similar actions at each meeting since then, including our most recent meeting earlier this month. The cumulative removal of pol-

icy accommodation to date has significantly raised measures of the real Federal funds rate, but by most measures, it remains fairly low.

The evidence broadly supports the view that economic fundamentals have steadied. Consumer spending has been well maintained over recent months and buoyed by continued growth in disposable personal income, gains in net worth, and the accommodative conditions in credit markets. Households have recorded a modest improvement in their financial position over this period, to the betterment of many indicators of credit quality.

The sizable gains in consumer spending of recent years have been accompanied by a drop in the personal savings rate to an average of only 1 percent over 2004, a very low figure relative to the nearly 7-percent rate averaged over the previous 3 decades. Among the factors contributing to the strength of spending and the decline in saving have been the developments in housing markets and home finance that have spurred rising household wealth and allowed greater access to that wealth. The rapid rise in home prices over the past several years has provided households with considerable capital gains. Moreover, a significant increase in the rate of single-family home turnover has meant that many consumers have been able to realize gains from the sale of their homes. To be sure, such capital gains, largely realized through an increase in mortgage debt on the home, do not increase the pool of national savings available to finance new capital investment. But from the perspective of an individual household, cash realized from capital gains has the same spending power as cash from any other source.

More broadly, rising home prices, along with higher equity prices, have outpaced the rise in household, largely mortgage, debt and have pushed up household net worth to about 5.5 times disposable income by the end of last year. Although the ratio of net worth to income is well below the peak attained in 1999, it remains above the long-term historical average. These gains in net worth help to explain why households, in the aggregate, do not appear uncomfortable with their financial position even though their reported personal savings rate is negligible.

For their part, business executives apparently have become somewhat more optimistic in recent months. Capital spending and corporate borrowing have firmed noticeably, but some of the latter may have been directed to finance the recent backup in inventories. Mergers and acquisitions, though, have clearly perked up.

Even in the current much-improved environment, however, some caution among business executives remains. Although capital investment has been advancing at a reasonably good pace, it has nonetheless lagged the exceptional rise in profits and internal cashflow. This is most unusual. It took a deep recession to produce the last such configuration in 1975. The lingering caution evident in capital spending decisions has also been manifested in less-aggressive hiring by businesses. In contrast to the typical pattern early in the previous business-cycle recoveries, firms have appeared reluctant to take on new workers and have remained focused on cost containment.

As opposed to lingering hesitancy among business executives, participants in financial markets seem very confident about the fu-

ture and, judging by the exceptionally low level of risk spreads and credit markets, quite willing to bear risk. This apparent disparity in sentiment between business people and market participants could reflect the heightened additional concerns of business executives about potential legal liabilities rather than a fundamentally different assessment of macroeconomic risks.

Turning to the outlook for costs and prices, productivity developments will likely play a key role. The growth of output per hour slowed over the past half-year, giving a boost to unit labor costs after 2 years of declines. Going forward, the implications for inflation will be influenced by the extent and persistence of any slowdown in productivity. A lower rate of productivity growth in the context of relatively stable increases in average hourly compensation has led to slightly more rapid growth in unit labor costs. Whether inflation actually rises in the wake of slowing productivity growth, however, will depend on the rate of growth of labor compensation and the ability and willingness of firms to pass on higher costs to their customers. That, in turn, will depend on the degree of utilization of resources and how monetary policymakers respond. To date, with profit margins already high, competitive pressures have tended to limit the extent to which cost pressures have been reflected in higher prices.

The inflation outlook will also be shaped by developments affecting the exchange rate of the dollar and oil prices. Although the dollar has been declining since early 2002, exporters to the United States apparently have held dollar prices relatively steady to preserve their market share, effectively choosing to absorb the decline in the dollar by accepting a reduction in their profit margins. However, the recent, somewhat quickened, pace of increase in U.S. import prices suggests that profit margins of exporters to the United States have contracted to the point where the foreign shippers may exhibit only limited tolerance for additional reductions in margins should the dollar decline further.

The sharp rise in oil prices over the past year has no doubt boosted firms' costs and may have weighed on production, particularly, given the sizable permanent component of oil price increases suggested by distant-horizon oil futures contracts. However, the share of total business expenses attributable to energy costs has declined appreciably over the past 30 years, which has helped to buffer profits and the economy more generally from the adverse effect of high oil and natural gas prices. Still, although the aggregate effect may be modest, we must recognize that some sectors of the economy and regions of the country have been hit hard by the increase in energy costs, especially over the past year.

Despite the combination of somewhat slower growth of productivity in recent quarters, higher energy prices, and a decline in the exchange rate for the dollar, core measures of consumer prices have registered only modest increases. The core PCE and CPI measures, for example, climbed about 1.25 to 2 percent, respectively, at an annual rate over the second half of last year.

All told, the economy seems to have entered 2005, expanding at a reasonably good pace, with inflation and inflation expectations well-anchored. On the whole, financial markets appear to share this view. In particular, a broad array of financial indicators convey

a pervasive sense of confidence among investors and associated greater willingness to bear risk than is yet evident among business managers.

Over the past 2 decades, the industrial world has fended off two severe stock market corrections, a major financial crisis in developing nations, corporate scandals, and, of course, the tragedy of September 11, 2001. Yet overall economic activity experienced only modest difficulties. In the United States, only five quarters in the past 20 years exhibited declines in GDP, and those declines were small. Thus, it is not altogether unexpected or irrational that participants in the world marketplace would project more of the same going forward.

Yet history cautions that people experiencing long periods of relative stability are prone to excess. We must, thus, remain vigilant against complacency, especially since several important economic challenges confront policymakers in the years ahead.

Prominent among these challenges in the United States is the pressing need to maintain the flexibility of our economic and financial system. This will be essential if we are to address our current account deficit without significant disruption. Besides market pressures, which appear poised to stabilize and over the longer-run possibly to decrease the U.S. current account deficit and its attendant financing requirements, some forces in the domestic U.S. economy seem about to head in the same direction. Central to that adjustment must be an increase in net national savings. This serves to underscore the imperative to restore fiscal discipline.

Beyond the near-term, benefits promised to a burgeoning retirement-age population, under mandatory entitlement programs, most notably Social Security and Medicare, threaten to strain the resources of the working-age population in the years ahead. Real progress on these issues will unavoidably entail many difficult choices. But the demographics are inexorable, and call for action before the leading edge of baby boomer retirement becomes evident in 2008. This is especially the case because longer-term problems, if not addressed, could begin to affect longer-dated debt issues, the value of which is based partly on expectations of developments many years in the future.

Another critical long-term economic challenge facing the United States is the need to ensure that our workforce is equipped with the requisite skills to compete effectively in an environment of rapid technological progress and global competition. Technological advances are continually altering the shape, nature, and complexity of our economic processes. But technology and, more recently, competition from abroad have grown to a point at which demand for the least-skilled workers in the United States and other developed countries is diminishing, placing downward pressure on their wages. These workers will need to acquire the skills required to compete effectively for the new jobs our economy will create.

Although the long-run challenges confronting the U.S. economy are significant, I fully anticipate that they will ultimately be met and resolved. In recent decades, our Nation has demonstrated remarkable resilience and flexibility when tested by events, and we have every reason to be confident that it will weather future chal-

lenges as well. For our part, the Federal Reserve will pursue its statutory objectives of price stability and maximum sustainable employment, the latter of which we have learned can best be achieved in the long-run by maintaining price stability. This is the surest contribution the Federal Reserve can make in fostering the economic prosperity and well-being of our Nation and its people.

Mr. Chairman, I request that my full statement be included for the record, and I look forward to your questions.

Chairman SHELBY. Without objection, your complete statement will be made part of the record.

Thank you, Chairman Greenspan. Thank you for your wisdom that you shared with us, some of it, at times.

Mr. Chairman, President Bush, I believe, has shown a lot of courage and leadership in highlighting the need to deal with Social Security. The President has proposed establishing, as you well know, personal accounts with a portion of payroll taxes as a means of reducing long-term Government liabilities. Some observers, however, have noted that up to $2 trillion—I do not know if that figure is right—in new Federal borrowing would be needed to make such a transition.

If that figure is a valid representation of transition costs, if so, how do you believe financial markets would react to such borrowings and so forth?

Chairman GREENSPAN. Mr. Chairman, if I may, I would like to just take a minute to put context around this whole problem.

Chairman SHELBY. Go ahead. Absolutely.

Chairman GREENSPAN. We have to really ask ourselves what the problem we are trying to solve is. The problem essentially is that we have an unprecedented potential increase in the number of people leaving the workforce and going into retirement over the next 25 years. Indeed, those age 65 and over will increase according to the Bureau of Census by more than 30 million, and that is an inexorable move as we all age and retire.

The problem that creates is that unless productivity growth increases significantly, the per capita GDP must significantly slow. That means either the retirees or active workers, say, in the year 2030, must experience a significant slow-down in their standard of living. And my concern is that we are putting forward, in a number of different programs, commitments to be fulfilled in the year 2030, for which the real resources are not being made available.

And the way real resources are made available in such a context is for savings to be put aside to be invested in capital assets, and those capital assets, by increasing relative to the labor force, tend to create increased output per hour. The correlation for that is very close.

So that unless we develop the savings to invest or significantly increase our borrowing from abroad, we are not going to be able to create the capital assets, to create the amount of goods that are required. Our problem, with respect to retirement, has got nothing to do with finance. It has to do with real assets, real physical resources, and goods and services that people consume.

What the test in this context of our individual financial systems should be is do they or do they not create savings to create the capital assets or put it another way, are they fully funded or not? For

example, Social Security, as a pay-as-you-go system worked remarkably well for 50, 60, 70 years, largely because a pay-as-you-go system works if population is growing sufficiently quickly and longevity is growing only modestly.

Now, we have had, in recent years, some slowing down in population growth, but a remarkable increase in life expectancy after age 65. That has created a very major problem for a pay-as-you-go system. And the reason, essentially, is, by its nature, in the purest form, pay-as-you-go creates no savings. It merely transfers from taxpayers, in any particular period, to beneficiaries.

Now, to be sure, there are some savings involved in the OASI fund in the sense of we have built up a trust fund, which is now approximately $1.5 trillion, but a fully funded OASI would require more than $10 trillion. So we are very far short, and we have very great difficulty in fully funding the existing system, and that is the reason why I think we have the problems that we are running into.

Not to take too much more time, let me just say very specifically, in response to your question, there are basically two models that we are confronting. One is the pay-as-you-go model which, if we can fully fund it, will work, but it has shown very considerable difficulty in doing that.

The other is the forced savings model which, in the current context privatization, is not increasing savings because you are switching from Federal Government savings to a forced savings account. But as a general model, it has in it the seeds of developing full funding by its very nature, and therefore I have always supported moves to full funding in the context of a private account, and I will respond in more detail in response to a number of questions that I am sure you and your colleagues have.

The issue with respect to the financing the transition is a difficult one to answer because there are things we do not know. There are two things which we do not know which are important, and if we knew them, we could answer it very explicitly.

First, we do not know the extent to which the financial markets at this stage, specifically, those trading in long-term bonds, are discounting the $10-trillion contingent liability that we have. Actually, it is more than $10 trillion now. It was $10 trillion a while back. If, indeed, the financial markets do not discount that $10-trillion-plus, and say it is just as much of a debt as the $4-odd-trillion that is a debt to the public, then, one would say, well, if you wanted to go to a private system, you could go fully to a private system without any response in interest rates because, obviously, you are not changing the liabilities that are involved. You are just merely switching assets to the private sector. But we do not know that.

And if we were to go forward in a large way, and we were wrong, it would be creating more difficulties than I would imagine. So, if you are going to move to private accounts, which I approve of, I think you have to do it in a cautious, gradual way and recognize that there is yet another problem involved, which is this: Unlike almost all of the other programs with which we deal, moving to a forced savings account technically does not materially affect net national savings. It merely moves savings from the Government account to a private account. One can argue at the margin as to

whether or not that induces some change in personal behavior, but it is at the margin.

So the question really is if it does not affect national savings, it should not affect the supply and demand for funds, but, again, we do not know how the markets respond to that. It is one thing to say it as an economist. It is another thing to say how the market is responding.

All in all, I am glad that if we are going to move in that direction, we are going to move slowly and test the waters because I think it is a good thing to do over the longer-run and, eventually, because the pay-as-you-go system, in my judgment, is going to be very difficult to manage, we are going to need an alternative.

Chairman SHELBY. Mr. Chairman, just to follow up, could we create the personal accounts without any substantial borrowing for the transition? And, if so, how?

Chairman GREENSPAN. Obviously, if you raise taxes, you could.

Chairman SHELBY. What about cutting benefits?

Chairman GREENSPAN. You could certainly do it that way, too.

Chairman SHELBY. One of those two.

Chairman GREENSPAN. Yes.

Chairman SHELBY. If one of the goals of reform that you alluded to is to increase real savings in this country, would it be desirable to pursue personal accounts as an add-on rather than as a replacement?

Chairman GREENSPAN. Well, it depends on how you finance it. We have add-ons. It is called a 401(k) at this stage.

Chairman SHELBY. That is right.

Chairman GREENSPAN. It is not clear to me what you want to do other than perhaps expand the 401(k)s, which I think become a very popular and very useful adjunct to our financial system.

Chairman SHELBY. Senator Sarbanes.

Senator SARBANES. Thank you very much, Mr. Chairman. I presume we are going to do multiple rounds here this morning.

Chairman Greenspan, the first thing I want to make clear or try to get clear is you said the increase in net national savings is a very important objective; is that correct?

Chairman GREENSPAN. Yes, sir.

Senator SARBANES. Is a reduction of the Federal deficit, does that translate into an increase in net national savings?

Chairman GREENSPAN. It does, Senator.

Senator SARBANES. So that eliminating the deficit or even running a surplus constitutes a contribution toward raising net national savings; is that correct?

Chairman GREENSPAN. It may be the most significant vehicle we have.

Senator SARBANES. I take it from that, that anything that markedly increases the deficit runs directly counter to the objective of increasing the net national savings.

Chairman GREENSPAN. That is correct.

Senator SARBANES. Because I recall 4 years ago you came before us—Senator Dodd alluded to that—and you told us, and I am quoting you now—this was when we were projecting, over a 10-year period, a $5.6-trillion surplus in the Federal budget, a $5.6-trillion surplus projected over 10 years, and now we are projecting

a $3.7-trillion deficit. That is a rather staggering turnaround of $9.3 trillion, almost $10 trillion. You told us, then, and that is why I am really concerned here, "The time has come, in my judgment, to consider a budgetary strategy that is consistent with a preemptive smoothing of the glide path to zero Federal debt or, more realistically, to the level of Federal debt that is an effective, irreducible minimum."

Now, that was taken I think by all as a view on your part that we were paying down the debt too quickly, and we had to alter the glide path and the payment down of the debt.

I remember saying to you at the time you have just taken the lid off the punch bowl because, at that time, of course, we were debating whether to do these extensive tax cuts. They were done. They were done the following year. Even more were done the year after, and now we have managed to transpose our economic outlook from this projection of over $5 trillion in surplus to almost $4 trillion in deficits, which I would take it you would agree constitutes a major setback to the goal of increasing net national savings.

Chairman GREENSPAN. I do, Senator.

Senator SARBANES. In view of that, would you say anything that markedly increases the deficit is the wrong path to go down?

Chairman GREENSPAN. In general, but let us remember that the basic issue is net national savings. Ordinarily, any increase in spending or reduction in taxes which is funded by marketable securities clearly increases the deficit and lowers national savings. The only reason I raise it at the moment is that we are discussing these private accounts, and this is one of the very rare cases in which you can increase the deficit, but not decrease the national savings.

Senator SARBANES. So you do not support through borrowing, sustaining the existing benefit levels to cover monies diverted from the trust fund into private accounts?

Chairman GREENSPAN. I think the issue is something which I am still puzzling about in the sense I am trying to get a sense as to whether the markets read this as no change in national savings, and therefore it is not a problem.

I do say, as I said previously, that I would be very careful about very large increases in debt, but I do believe that relatively small increases are not something that would concern me.

Senator SARBANES. Do you regard increases of $1 trillion or $2 trillion or $3 trillion as large?

Chairman GREENSPAN. I would say over a trillion is large.

Senator SARBANES. Mr. Chairman, if I have time. I am sure we will revisit this issue, but I want to come back to another issue. You stated that inflation and inflation expectations are under control in your testimony here this morning.

Chairman GREENSPAN. I said they were contained, I believe.

Senator SARBANES. What factors warrant raising interest rates if inflation and inflationary expectations are contained and if there remains a jobs problem. In other words, the Federal has obviously set out on this constant escalator now of taking up the interest rates. Why would we continue to do that if we do not have an inflation problem that we have to confront? Why would we not, as I suggested, pause and take a look at and see how the economy strengthens and how we pick up on the job side? What is the factor

that drives raising these interest rates inexorably, meeting after meeting after meeting, and where will it stop, or what factor would determine when it stops?

Chairman GREENSPAN. Senator, I will not comment about the future because that is up to the Federal Open Market Committee in its meetings, but I will address the issue as to why we have moved from 1 percent——

Senator SARBANES. I am told you are primus inter pares in those Federal Open Market Committee meetings.

Chairman GREENSPAN. I am sorry?

Senator SARBANES. Primus inter pares, that you speak for the group.

Chairman GREENSPAN. I have one vote.

[Laughter.]

But let me address why it is that we have moved from 1 to 2.5. We very purposefully moved the Federal funds rate down quite sharply in the context of the set of financial deflationary pressures which occurred as the stock market came down, and capital investment went down, and capital goods spending went down. And so we very purposefully decided to drive the Federal funds rate well below what we considered a long-term sustainable rate, and we got down to 1 percent. We had no notion as to how far we would have to go down, but we decided that we went down, when we got down to 1 percent we could hold it there for a while.

When it became clear that the excessive accommodation which we purposefully injected into the financial system was no longer necessary, we then proceeded to withdraw it. We are withdrawing purposefully injected excess accommodation into the system. Had we left it there indefinitely, in our judgment, it would have engendered significant inflationary imbalances. So we embarked on, as we discussed, what we called a measured pace of increase.

As you know, the response in the marketplace has not been one of significantly rising long-term rates, difficulties in the housing market, and other problems which we had run into in the past in previous increases in rates. So that I would not look at this as a pattern that we were involved in for purposes of addressing what was then going on within the economy, but rather, as removing something which we knew had to be temporary. And one tries to remove it as rapidly as possible with the obvious caveat, that should the economy show signs of weakening, clearly we would respond, and we have made that statement every time we have issued one following a Federal Open Market Committee meeting.

We are not oblivious as to what is going on in the economy. Our judgment, as I indicated in my prepared remarks, at the moment is that the economy is moving forward at a reasonably good pace.

Senator SARBANES. Does this analysis assume that there is some normal rate of interest, I mean a figure that you are trying to get to that you say, well, this is what the normal rate of interest should be? Is there a premise of that sort in this analysis?

Chairman GREENSPAN. There is, Senator. We do not know what the actual number is, but it is that interest rate which creates a degree of stability in the economy and removes any excess which would create inflationary pressures.

Senator SARBANES. Is it possible that that rate would change as circumstances develop? I thought it was commendable that you did not buy the national accelerating rate of unemployment analysis, which said at a certain unemployment figure, if we go below it, we are going to drive inflation up, and therefore we start constraining the economy, and that costs us jobs, and we do not get back to our full potential, but we are prepared to go against that dogma at the time and move on down the interest rates, give the economy a boost and bring down the unemployment rate well below what had previously been seen as normal.

I guess the question I am asking is whether we need to think in those terms again with respect to this normal interest rate. I mean what may be a normal interest rate in changing circumstances may be lower than what previously was a normal interest rate. And of course a lower interest rates stimulates the economy. Presumably it makes carrying this debt less costly rather than more costly, and has a lot I think of other benefits for the workings of our economic system. So that is why I am suggesting that we need to reexamine.

Chairman GREENSPAN. We believe that so-called “normative rate” or whatever you want to call it, is not stable. It does move around, and that is the reason I say I do not know where it is. I do know that we have the capacity to examine how the market is behaving in all of its myriad manifestations so as to be able as a committee, I hope and believe, to judge where we are at all times. We may not be able to forecast it, but I do think we have enough analytical technology to be able to make a judgment as to where we are at any particular point in time. I am almost certain that that rate does move around, and we are constantly trying to get the appropriate fix because that is implicit, as you point out, in the strategy that we started to pursue last year.

Senator SARBANES. Thank you, Mr. Chairman.

Chairman SHELBY. Senator Bunning.

Senator BUNNING. Thank you, Mr. Chairman.

I am not going to ask you the obvious question about inflation. You already have answered it. In the past it is my recollection you were not as concerned with the current account deficits as you were with other economic figures. Back in November, when the current account deficit reached record levels you did express concern. But in February, your concern eased as the current account deficits decreased. Would you comment on the current account deficit and your concern or lack thereof?

Chairman GREENSPAN. Senator, it is an extraordinary part of a phenomenon which has been going on for the last decade worldwide. Prior to 1995, there was a very major grossing up of exports and imports around the world, leaving as a consequence on average imports as a percent of GDP growing every year virtually. We nonetheless did not find that there was any evident consistent increase in the dispersion of trade or current account surpluses and deficits. In other words, there was what economists call a very considerable amount of home bias, meaning that countries tended to use their domestic savings to very largely finance their domestic investment. But since 1995, there has been a very pronounced change in which cross-border use of savings to invest in foreign countries all over the world has increased dramatically, which has

meant that the dispersion of current account balances, both as surpluses on the one hand and deficits on the other, with the United States as the largest deficit, has increased.

That phenomenon has given us the capacity to create a very large deficit, and indeed it has been a major source of financing to our domestic investment. But as I also said, and I think you pointed out, over the longer-run it is just not credible that it could go on without change because you will get an undue concentration of dollar claims on U.S. residents, which even though they are considered a highly valuable, and have high rates of return and the like, they lack the diversification of a good portfolio, and foreign investors would therefore start to ease off. And if you cannot finance a current account deficit, it will not exist. So that is surely the case. But I have also said that the degree of flexibility, owing to deregulation, owing to technology, owing to lots of innovation, has created a degree of flexibility and therefore resilience in this economy that has in the past and is very likely in the future to defuse this large current account balance without undue negative economic effects on the American economy.

So what I said in the last several weeks is, one, this is a problem; we are approaching it and I think coming to grips with it in the marketplace, and the evidence is that for the first time we are beginning to see the impact of stable margins of foreign exporters at very low levels now beginning to produce increases in import prices in the United States, which is the first stage in the adjustment process.

Senator BUNNING. As you know, the SEC has proposed a new Regulation B to Section 2 of the Gramm-Leach-Bliley Act. The Fed, along with the FDIC and the OCC, wrote a very strong letter to the SEC opposing their proposed regulation. Would you comment on how this proposed regulation could affect the bankers?

Chairman GREENSPAN. I am sorry. I do not remember what the specific nature of the regulation was.

Senator BUNNING. You do not remember what you wrote?

Chairman GREENSPAN. No, no, I do not remember the specific SEC regulation to which you refer. I know I write a lot of things, but I am just basically saying I do not—one of my staff will know exactly what I wrote. They will tell me.

Senator BUNNING. So will my staff there.

Chairman GREENSPAN. Okay.

[Laughter.]

Senator BUNNING. How you would regulate new bank products?

Chairman GREENSPAN. I remember it now. I did not remember the name, but I now remember the issue, which is a significant issue.

Senator BUNNING. Our bankers think it is very significant.

Chairman GREENSPAN. It is. In fact, I think we are concerned about that as well, and I think that the resolution of this question is clearly going to have to be completed because the brokerage operations within the banks as such are integral parts of a process which we perceive to be important to banks overall, and we will get it resolved I hope sooner rather than later.

Senator BUNNING. Then you still oppose, along with the other people who have written SEC?

Chairman GREENSPAN. Yes, sir.

Senator BUNNING. Thank you very much, Mr. Chairman.

Chairman SHELBY. Senator Reed.

Senator REED. Thank you very much, Mr. Chairman.

Just for context, Chairman Greenspan, you referred to a $10 trillion shortfall in the Social Security trust fund. Over what time period is that?

Chairman SHELBY. This is the present value of the benefits earned by those currently in the labor force over the years as of right now, plus the benefits of those who are retired and receiving benefits which they had earned previously. So it is the discounted value of all of the benefits which are to be received by the total labor force and retirees over essentially indefinite period in time.

Senator REED. Longer than the 75-year planning phase?

Chairman GREENSPAN. Oh, yes, yes. I think if you cut it off at 75, I think it is $3.7 trillion.

Senator REED. And that is generally the norm in terms of——

Chairman GREENSPAN. Yes, but I think that it is an artificial norm, and most pension fund accounting thinks in the full context of the actual liabilities one has, and a 75-year period is a convenience that relates largely to a pay-as-you-go system, but it is not consistent with the general notion of how one runs a defined benefit program. Were pay-as-you-go a fully funded defined benefit, I think many of the objections I raised earlier on would disappear.

Senator REED. Let me ask you another question, Mr. Chairman. Various Administration spokespersons, somewhat reluctantly have admitted that the private accounts plan that has been announced will by itself alone do nothing to improve the long-term solvency of the Social Security system. Do you agree with that?

Chairman GREENSPAN. I do, Senator.

Senator REED. Thank you. Would you also agree—and I think this is a follow up really to your discussion with Senator Sarbanes—is that the private accounts will basically leave national savings unchanged since the Government has borrowed money to give to individual citizens to invest in the market. Do you agree with that also?

Chairman GREENSPAN. Yes, I do.

Senator REED. Looking at the system, there are various means to make it essentially a pay-as-you-go system. One would be to take a portion of the proposed extension of the taxes the President is talking about and putting that into the Social Security Trust Fund. Just on a—that would establish a pay-as-you-go system; is that correct?

Chairman GREENSPAN. It depends. If in the full context of accounting it increases national savings, then the answer is yes, but the test has to be how it effects the private sector and the public sector, and if net on balance is constructed in a manner to do that, then yes.

Senator REED. Thank you. In 1983, Chairman Greenspan, you were the Chairman of the Commission that rescued Social Security from the brink. If this is a crisis, that was a catastrophe back in 1983. Your colleagues and yourself joined in saying that in the words of the report, that Congress should not alter the fundamental structure of the Social Security programs or undermine its

fundamental principles. Part of the fundamental principle of Social Security is it is an insurance program, not just an investment vehicle. One of the most obvious manifestations of that is that many of the beneficiaries are not retirees at all, but they are disabled Americans. They are children who do not have parents or they are widows.

Proposals that are being assessed today could alter those principles fundamentally. I understand also in 1983 you did consider the changes that would transform it from a defined contribution plan into something else, at least you thought about those things. But do you still believe that we should maintain the fundamental principles of Social Security as you did in 1983?

Chairman GREENSPAN. I think we should maintain the principles of Social Security, but I think the existing structure is not working, and that until we can construct a system which creates the savings that are required to build the real assets so that the retirees have real goods and services, we do not have a system that is working. We have one that basically moves cash around, and we can guarantee cash benefits as far out and at whatever size you like, but we cannot guarantee their purchasing power. This is why the issue ultimately has to be resolved in terms of do we have the material goods and services that people will need to consume, not whether or not we pass some hurdle with respect to how financing occurs, because the financing is a secondary issue, and it is the means to create the real wealth, not an end in itself.

Senator REED. That goes back to your fundamental point that unless you increase national savings, you will not have these resources.

Chairman GREENSPAN. Yes, sir.

Senator REED. And just to follow up on your point before, as the Administration has admitted, and as you concur today, that the present proposed private accounts will not add to those national savings?

Chairman GREENSPAN. It does not add, but it does not subtract either, that is correct.

Senator REED. So it is a zero?

Chairman GREENSPAN. Let me just say that in any move which we endeavor to create full funding, there is a huge transition cost because we have not built the stock of assets required, and that is the shortfall of the difference between the $1.5 trillion and the $10 trillion plus in funding assets. Actually, if you go further and you put Medicare in here, we are talking another $60 trillion. So the problem that we have is there is a huge transition cost to get us to a point where we are building the savings adequate to produce the assets. We are not doing that, and any scheme cannot get around the fact that there is a huge hole in the system, and we have no choice but to find a way to fill it.

Senator REED. I am recalling reading the book, Secretary O'Neill's book, in which if you believe it is accurate, and I do, is that you have discussions with him about solving some of these issues with the surplus, which at that time we could fund transition costs, but at this point, running a deficit, we have squandered the opportunity to make a serious transition in terms of both Social

Security, Medicare, Medicaid, and other programs, and that to me is one of the casualties of the Administration's policies.

And I thank you, Mr. Chairman.

Chairman SHELBY. Senator Crapo.

Senator CRAPO. Thank you very much, Mr. Chairman.

Chairman Greenspan, I want to continue on this same line of questioning. We are hearing a tremendous amount of discussion in the public today, both among the political leadership here in the U.S. Congress and in the Administration as well as out in the public about these transition costs that are related to the proposal to move to personal accounts with a portion of the taxes paid in payroll.

And as you have discussed today, I believe I understand your testimony to be that with regard to national savings—and I assume that means governmental savings.

Chairman GREENSPAN. National savings is another word for domestic savings to differentiate it from the fact that we do not include the current account deficit or foreign savings that we borrow in that total.

Senator CRAPO. All of this is a discussion of the Government's posture and the Government's savings, is that not correct?

Chairman GREENSPAN. Government savings, both State and local and Federal, is part of national savings. Maybe that is a bad term. Probably domestic savings should be used.

Senator CRAPO. Does it include the personal savings of the individuals across the country?

Chairman GREENSPAN. Yes. The way to think about this is that the aggregate of domestic savings includes the savings of households, businesses, and governments, and that is the part which we call domestic savings.

Senator CRAPO. If we move then to a system of personal accounts, where individuals were able to save a portion of their payroll taxes, can I correctly assume that the reason you say that does not increase national savings is because it is putting money in individual accounts that would otherwise be in a different savings account?

Chairman GREENSPAN. No. Let me see if I can come back at this. If in its original form we did not have anything other than a requirement that we had 12.4 percent tax which was put into a private account, in other words, that particular fund coming off the person's income and the employer's income would go into a forced savings account. In a sense private savings would increase by that amount, and the part that the corporation contributed which would have reduced its undistributed earnings, which would have been savings, would be a negative. But net it would, except under a certain number of distant conditions, it would be a net increase.

Senator CRAPO. So the employer's savings would be reduced but the employee's savings would have gone up, and there would be a net zero balance?

Chairman GREENSPAN. Yes. In order to get savings, remember you have to get consumption declining relative to income.

Senator CRAPO. I appreciate that because I think that there is a lot of misunderstanding about that fact, as we discuss this issue. And when we discuss the cost, there is a lot of discussion about the

transition cost being—I have heard the number of $2 trillion. The Administration says the number in terms of its proposal is more in the neighborhood of the $7 to $8 hundred billion over 10 years. Is the same not true about that transition cost in the sense that those costs are actually related to debt in out-years or obligations in out-years of the Social Security system that are being borrowed to take care of in earlier years?

Chairman GREENSPAN. Well, the President has not made a formal proposal.

Senator CRAPO. I understand.

Chairman GREENSPAN. But I gather what he has in mind is in a sense that the amounts that go into the private account are offset after discount with benefits that would have been paid with those monies in the Social Security system.

Senator CRAPO. And making that assumption, is it not correct to say then that the transition costs, although they would be incurred now, and would require some borrowing to pay for them now, are actually relieving an obligation of the Social Security system in out-years?

Chairman GREENSPAN. The problem is that you cannot commit future Congresses to stay with that.

Senator CRAPO. Unfortunately, I understand that.

Chairman GREENSPAN. And as a result, the markets will not discount as though that were the case, even though it is the intention and that is what the law would say, and if you could put it in the Constitution I suspect you may be right.

But I think the relevant issue here is that how the markets interpret it is really in a sense the important issue because if the markets correctly or incorrectly make a judgment as to what they think the potential outcome is, we can get interest rates going up or going down, and we would have significant effects that we would prefer probably did not occur. So my caution here is based on not knowing and not knowing how to know in advance how markets will respond.

I do know that asking people in the marketplace is of no value at all, because they do not know. They will tell you they know, but I have not found that a very useful forecast.

Senator CRAPO. I appreciate your encouragement that we move cautiously in terms of this proposal, but I also appreciate that you have said that you believe that we should look at a personal account.

Chairman GREENSPAN. Oh, indeed I do.

Senator CRAPO. Could you give us just quickly your reasons for that?

Chairman GREENSPAN. Well, basically it has to do with the issue of personal accounts have far greater probability, indeed, almost it is built into their nature, of being fully funded. And the simple form of pay-as-you-go by construction saves nothing. And unless you save, merely basically creating dollar commitments in the future without the corresponding real resources to accommodate the claim, you will get more claims on a fixed amount of goods than is good for the inflationary balance of the system. So it is strictly a question of where can we create a system which we get full funding. It did not matter 20, 30, 40 years ago because the ratio of

workers to retirees was quite high and that therefore the implicit tax per worker for each retiree was very small. But now we have 3.3 workers for every retiree, and that number is falling quickly.

So the current system is ill-suited to the demographics that we are expecting to evolve in the future. And while a pay-as-you-go system worked very well, I thought, surprisingly well, through decades, that was because of the special case of the demographics of the society at that point. It is not a general system in the sense of a defined benefit or defined contributions system, which very explicitly indicates what type of replacement rate to expect meaning the amount of income you expect in retirement to get relative to the amount of income you are making in the last years of work.

Senator CRAPO. Thank you very much.

Chairman SHELBY. Senator Schumer.

Senator SCHUMER. Well, once again, Mr. Chairman, thank you for your erudition on this, which leaves us all better educated and maybe more confused, too.

I would like to go back to these accounts and Senator Sarbanes's questions. You said you cannot really tell if net savings will increase or decrease with a private account system that draws money from the existing Social Security system because you do not know how much the markets have discounted, if at all, the future obligations that we have.

Chairman GREENSPAN. If I may, whether it actually increases savings or not is a fact independent of what people's opinions are.

Senator SCHUMER. I agree.

Chairman GREENSPAN. So it is not the market. I think the problem here is that we have a system in which, starting from scratch, forced savings will be pay-as-you-go all the time.

Senator SCHUMER. Right. But a transfer, which is proposed now, is a different issue, and we do not know how the markets will regard that transfer.

Chairman GREENSPAN. Exactly. Yes.

Senator SCHUMER. Okay. Now I want to take two cases. One, they have discounted for it; the other, they have not. If they have not, and we go forward with this system that we hear about, where you transfer some money from the existing Social Security system to private accounts, that would create a real problem, particularly, as you have mentioned to Senator Sarbanes, if the amount is $1 trillion or $2 trillion or whatever. That is indisputable, I presume.

Chairman GREENSPAN. It is a trillion dollars over 10 years we are talking about.

Senator SCHUMER. Yes. Yes.

Chairman GREENSPAN. Two trillion is indisputable. A trillion dollars, I think, is right at the margin. I should not say I know that. That is my assumption.

Senator SCHUMER. Yes. Understood. And we are all guessing here.

Chairman GREENSPAN. Yes.

Senator SCHUMER. But that could be bad. Let us make no mistake about that.

Chairman GREENSPAN. It could be bad and it could be very good. I mean, my judgment is we have a problem in that the existing pay-as-you-go system is not working and we have to change it.

Senator SCHUMER. Well, nobody disputes that.

Chairman GREENSPAN. We have to change it. The question is how.

Senator SCHUMER. Yes. Well, nobody disputes that we need some change. But it seems to me if the markets have discounted all of this, then it does not do any harm, but it does not do any good, because net savings is not increasing, as you said before. If the market has not discounted a rather large amount of debt being added to the existing debt—obviously, 15 or 20 years ago this would not have been a problem—then we have real trouble.

Chairman GREENSPAN. Well, but if you move——

Senator SCHUMER. So it is not win versus lose, it is either lose or stay static.

Chairman GREENSPAN. No, because if you begin to move significant parts of the existing social insurance system into accounts which begin to create full funding, whereas left where they were, they won't, then you do increase national savings over time.

Senator SCHUMER. But that is a huge "if."

Chairman GREENSPAN. Well, no, it——

Senator SCHUMER. Because it will only increase full funding if you dramatically cut a benefit. You have to do other changes than simply move one to the other. What we are trying to get at here is not the overall change that is needed, and I do not think anyone disputes what you say, but whether setting up a private account—under current conditions, not starting from scratch—does anything to alleviate the problem.

Chairman GREENSPAN. In and of itself it surely does not alleviate the current problem. Actions have to be taken.

Senator SCHUMER. Exactly.

Chairman GREENSPAN. I am merely saying that if you move to private accounts and——

Senator SCHUMER. And.

Chairman GREENSPAN. —the financial markets have at least partially discounted the contingent liabilities, then you are a net plus, because then you have——

Senator SCHUMER. Right. Understood. Okay. But if they haven't, you are not.

Chairman GREENSPAN. That is correct.

Senator SCHUMER. Okay. So it seems to me that what you really are advocating here without saying it, which would truly increase net savings, is what is called around here Social Security Plus. Fix Social Security on its own and if you want to do private accounts and increase net savings over the present system, you do those in addition, whether it is for savings or greater incentives, which 401(k)'s or whatever mention; in other words, fix the present system and then do the private accounts, not in replacement but in addition—do more for net savings?

Chairman GREENSPAN. It depends on how you finance them. In other words, the question here is if you are going to expand 401(k)'s, I think that is a desirable thing, too.

Senator SCHUMER. Exactly.

Chairman GREENSPAN. If you are going to set up another program which is an entitlement, which——

Senator SCHUMER. No, no, no. I am just saying a 401(k) the first. I am saying the first. That will do more to increase net savings than simply shifting some money from the present system to a so-called "private account." I think that is indisputable.

Chairman GREENSPAN. Well, 401(k)'s are private accounts, so——

Senator SCHUMER. I understand. But in addition, as opposed to replacement. Because you will have more net savings.

Chairman GREENSPAN. Yeah. No, no, I am not disagreeing with you. I say that that is correct. I just want to make sure that you are not talking about a new entitlement.

Senator SCHUMER. No, I am not. And furthermore, we would have an easier time fixing Social Security if our debt went down. It would have been easier to fix it 6 years ago or in 1983 than it is today because one of the great problems is all the debt we have right now. Is that not fair to say, too?

Chairman GREENSPAN. I think that is fair to say.

Senator SCHUMER. Okay. Let me tell you just—I know my time is up—it seems to me that what you are saying here is that moving to the system that is outlined, that the President may propose, is risky. It is risky because we do not know what the markets will do if they see it, and at the same time it does not increase overall net savings in and of itself. And I know you do not want to say that, but it seems to me it is inevitable and inexorable from what you have outlined here in terms of those two parts. Where am I wrong there?

Chairman GREENSPAN. Senator, it is risky. Doing nothing is risky. Doing any other solution to this is risky. We have this huge hole in our long-term funding problem, and I know of no way to resolve it without some risk. It is a question of which risks are more likely to be——

Senator SCHUMER. Right. It seems to me what you are saying is, just on the way the privatization accounts are proposed, the risks far outweigh the benefits unless we do something else with it.

Chairman GREENSPAN. That is the reason why I think that starting slowly and finding out how it works is a very good idea. Because if it turns out to be something which creates problems, or if people do not like the thing—remember, it is a voluntary issue and they may just choose not to take it. My own judgment is when you have assets which you own, which you can bequeath to your children, and which have your name on them that is a highly desirable thing because you give wealth basically to people in the lower- and middle-income groups who have not had it before. Because remember, these private accounts, even though they are forced savings, are indeed owned by the people and they have wealth which they probably would not have had before. So that I can conceive of these being extraordinarily popular accounts. And if they are, I think it is a very important addition to our society, because as you know, I have been concerned about the concentration of income and wealth in this Nation, as indeed your colleague has been as well, and this in my judgment is one way in which you can address this particular question.

Chairman SHELBY. Senator Dole.

Senator DOLE. I would like to ask you to discuss the issue of rising health care costs and the impact on businesses. I have heard

from a number of North Carolina businesses that rising costs are directly affecting their hiring decisions. Could you give us your views on this area and whether or not you believe it is having a negative effect on wage rates and employment?

Chairman GREENSPAN. Senator, I think it is a very difficult issue. And I think that to the extent we see that benefits are going up and wages have flattened out, relatively speaking, a goodly part of this is the fact that individuals are willing to take health benefits in lieu of wages and salaries, but only in part. So overall, there is no question that the net effect on cost to businesses is rising.

My own judgment is that the Medicare problem is, of course, several multiples more difficult than is Social Security. But I am also of the belief that we probably ought not to address the medical issue quite yet, until we get much further down the road in the advance in information technology in the medical area, which a number of individuals are looking into, and indeed there are Members of this body on both sides of the aisle who are focused on this issue, and I think, to the extent that we can begin to get major advances in information technology at an encrypted individual level, I think that best clinical practice is going to change. And it is going to change because we are going to see things that we already suspect, on the basis of certain different types of surveys, namely, that there are all different types of practices for specific diseases across this country with very varying outcomes, and it is largely the unavailability of all of the information which has made the improvement in clinical practice difficult. And in my judgment, we have to get to the point where the medical profession, following from the information technology, creates a best clinical practice, at which point I think that an endeavor to address the problems that you are concerned with and, in the broader sense, the medical profession generally is concerned with, would be appropiate. If we were to do it now or even next year, I am fearful we would be restructuring an obsolete model and have to come back and undo it.

So, I agree with people who are saying we should do Medicare first before Social Security because it is a much bigger problem. I agree it is a hugely much more difficult problem. But I am not sure I would agree with the issue of the sequence, wholly because of what is now occurring in medicine.

Senator DOLE. And let me ask you about manufacturing. As I mentioned in my opening statement, and we all know, North Carolina and a number of other States have been hit hard by the loss of manufacturing jobs since 1998. According to the Bureau of Labor Statistics, manufacturing employment has remained level in the last year. Do you see growth in manufacturing in this next year?

Chairman GREENSPAN. Senator, it is hard to tell. And the reason is that it is very difficult to judge how fast productivity is going to advance. As you know, productivity in manufacturing has really been very impressive. The downside, obviously, is it has created fewer job opportunities. And we can reasonably assume that the economy is going forward at a fairly good clip and that therefore the demand for manufactured goods will continue reasonably significant. But it depends on productivity growth, or I should say the extent to which manufacturing jobs change one way or the other depends on whether productivity growth goes up or slows down. It

is very tough to judge. So, I could not give you an answer, because I have tried to forecast manufacturing employment and, I must tell you, my record is not altogether terrific.

Senator DOLE. Thank you, Mr. Chairman. My time has expired.

Chairman SHELBY. Senator Stabenow.

Senator STABENOW. Thank you, Mr. Chairman. And welcome again, thank you for your service and for your being with us today.

I want to follow up on Senator Dole's questions on manufacturing. I share her concerns. Michigan has had the same type of, certainly, challenges as it relates to manufacturing.

But I first want to thank you for some insights in your statement that you expand upon in your written statement more than you are able to do as you spoke today, as it relates to education. Because I think this is critically important, and I appreciate your wisdom of your comments here and I think they are comments that we should take very, very seriously. You talk about, "The failure of society to enhance the skills of a significant segment of our workforce has left a disproportionate share with less skills. The effect is a widening wage gap between the skilled and the less-skilled." And then you go on to talk about "In a democratic society, such a stark bifurcation of wealth and income trends among large segments of the population can fuel resentment and political polarization," which I believe is happening today. And I share your concern about the concentration of wealth and, really, what I view as splitting of the middle class in this country due to a host of issues.

But I think it is important to emphasize that you said that strengthening elementary and secondary schooling in the United States, especially in the core disciplines of math, science, and written and verbal communications, is one crucial element in avoiding such outcomes. I would not expect you to comment on this, but I would just say for my colleagues, putting my budget hat on, this is of deep concern to me when I see that one-third of what has been proposed in the President's budget in terms of cuts are in education. And I think that goes right to the heart of what you speak about here. I would not necessarily expect you to comment on the President's budget, but I think we should be listening to you because we have huge wage and skill gaps that will affect us for decades to come and we need to be investing in skills and education.

Turning to a different subject, in terms of our debt, and this actually goes back to my concerns on manufacturing, but it relates indirectly to manufacturing when we look at our dependency on inflows of foreign capital to finance economic activity. And then I would argue on the other hand our difficulty in enforcing trade agreements against those who own so much of our foreign debt. I think this is going to be making it more and more difficult for us. I would welcome your thoughts on that.

But when we look at the fact that—and I just have a small chart, but in the last 4 years, foreign holdings of U.S. Treasury debt has gone from basically a trillion to $1.85 trillion, and about half of that is owned by China and Japan. People would be shocked to know who else owns our foreign debt, as we are talking about financing private accounts through Social Security or other privatization efforts or anything else that we are doing for that matter—the war or anything else. That South Korea, Taiwan, Germany,

Hong Kong, OPEC, Switzerland—we have a lot of foreign entities that hold portions of our debt right now. And I am wondering at what point, particularly when we are looking at $2 trillion, or we are hearing now that 20 years down the road, two decades, potentially $5 trillion in new debt added if in fact privatization in some part goes into effect, of Social Security, at what point do you believe that we should be concerned that our foreign financing of our national debt is becoming too great?

Chairman GREENSPAN. Senator, we have the difficult problem that people find U.S. Treasury securities the safest in the world. And it is not as though we are forcing them to go buy our securities, nor do I believe we have any legal mechanism to prevent them from buying them in the open market, which is what they do. So, I am not sure how to address this issue because I am not sure what we can do about it. The notion, however, which came out, I think, a couple of weeks ago, that there was a significant move toward selling off U.S. dollar instruments by foreign central banks, that actually was not accurate. The extent of holdings remains very heavy for dollars as a share of their aggregate holdings. And part of the decline, very small, is the very fact that if you take a portfolio with dollars and, say, euros, and a dollar's price falls relative to the euro, then the value of euros in dollar equivalents rises and that therefore it looks as though the dollar has gone down as a share of total outstanding portfolios, when indeed it has not. That is basically what the case is.

But on the broader issue you are raising, I am not sure how to handle that because I am not sure what the longer-term implications are. You are quite correct at the moment, excluding the U.S. Treasury debt held by the Federal Reserve, half of our debt is owned abroad. And I would assume at some point it has consequences, but I cannot tell you what they are.

Senator STABENOW. Mr. Chairman, is it not reasonable to assume, though, that every time we are adding national debt, we are adding opportunities for foreign investors to purchase those bonds, so that one way to stop the foreign holdings increasing would be to stop the national debt from increasing?

Chairman GREENSPAN. Well, we had believed we were going to run the debt down to zero not that many years ago. That would have solved the problem.

Senator STABENOW. I remember your being here with us in 2001, when we were talking about the wonderful problem of having too large of a surplus and the question of what we do about that.

I wonder if I might ask one further question. I know my time has expired.

Chairman SHELBY. Go ahead.

Senator STABENOW. Thank you, Mr. Chairman. One further question. It is similar in terms of what is happening abroad for us. Would it be your position that free-floating currency is an essential element of efficient capital markets? And to that end, would you be supportive of mechanisms whose goals are to ensure that nations allow for floating currencies?

Chairman GREENSPAN. Well, in general I would say flexibility, which is an extraordinarily valuable asset to the world financial system, is clearly advanced by having essentially a free-floating

rate system—which is largely what we have. The difficulty is that numbers of nations find dealing with fluctuating or variable currencies difficult to handle for lots of different reasons, and they choose on their own to lock in against the euro or the dollar or a basket of something, and accumulate or decumulate their foreign assets to sustain it. So it is largely actions taken by foreigners, not something which can be mandated by anybody. In other words, I am not sure of the mechanism that, for example, the IMF would be involved in to induce somebody to go from a fixed to a flexible rate. They could suggest to them that it is in their interest. And indeed, we do on numerous occasions. But there is no legal mechanism to require it because they always have the capacity of purchasing or selling dollar, yen, or euro, or Sterling assets in the marketplace and thereby create a nonfloating currency.

Senator STABENOW. One mechanism—and I will close, Mr. Chairman; thank you for your patience—but we do have in the Banking Committee, I am sure we will be hearing from Secretary Snow in his yearly report that he is required to give about countries that may be pegging their currency. And certainly many of us on both sides of the aisle have expressed concern, particularly about China and what the impact of pegging their currency has done in terms of the costs of goods and services in our country as well as selling into their country. And so there is a mechanism. If in fact the Treasury Secretary would just simply certify that it is happening, at least internationally, we would have the opportunity to make our case. And I am hopeful the Secretary will do that before the Committee later this spring.

Chairman SHELBY. Thank you, Senator.

Senator Bennett.

Senator BENNETT. Thank you, Mr. Chairman.

It has been a most illuminating morning, Mr. Greenspan, and you have helped focus a lot of issues on this debate. The debate, of course, has been primarily on Social Security. I had some questions on the band of interest rates similar to Senator Sarbanes, but I think you exhausted those with Senator Sarbanes with your stating that the band of normal keeps changing, and normal keeps changing. I would just hope in the Federal Open Market Committee you might think that around a 3-percent band has become normal in the present economy and not feel the need to go to higher levels, which may have greater historic patterns to them. And I am encouraged by your comment on that.

But the Social Security debate has dominated the morning, so I will get into it as well and make the general statement that I always make. There is no such thing as repetition in the Senate, I have discovered, so you just keep saying it. Any economic forecast that goes out more than 6 months is wrong. I do not know whether it is wrong on the high side or the low side. I just know that the way the economy works and all of the changes that go in, if you get beyond 6 months you are getting into difficult territory.

I believed that about the $5 trillion surplus. I knew that number was wrong. I believed that about the projections of a $4 trillion deficit. I think now that number is wrong. It will be different.

The one thing that is not wrong, that is much more inexorable than an economic forecast is the demographic forecast. The demo-

graphics are destiny, and they change very slowly and over long periods of time. So, I am delighted to have you in your presentation here and in your written statement say that the demographic pressure on Social Security is going to begin in 2008, not 2018, not 2042, not 2052 or whatever, because that is the date when the demographics kick in and say that we are going to have a 30-year period of dramatic increase in the percentage of Americans who are over 65.

I am delighted to hear Senator Schumer, as you talk about the fact that the present system is not working, say nobody disputes that. I can quote some statements on the floor during morning business where there are a lot of people who dispute that and say this present system is working beautifully and we do not need to do anything about it. And I am also delighted to have Senator Schumer say in your dialogue that we should have started on doing something about Social Security 10 years ago, and it would be easier if we had started then instead of waiting this long.

With that, let me get, however, to the point once again that you were debating with Senator Schumer as to whether or not a personal account would increase national savings. Your point here is a block of tax money, 12.4 percent of payroll, and you are saying if that portion which is currently coming out of the employer's side goes to a personal account, it produces no net increase in savings because the employer would save that if he did not have to pay it and presumably would invest it in capital stock, whatever, that would increase the productivity and, therefore, the reason you want national savings. So you could increase the national savings by saying to the employer do not pay that anymore, invest it.

But that portion that comes out of the individual's side gets invested in capital assets, which is different than how it is being invested now. So doesn't that shift in the investment strategy to capital assets as opposed to an accounting number somewhere in the unified budget mean that you will, in fact, get some increase in capital investment and, therefore, make a contribution toward increasing the productivity of the economy?

Chairman GREENSPAN. Yes, Senator, I agree with that. Let me just reiterate that what obscures the discussion is how to handle the transition costs, which are the equivalent in one form of a huge unfunded liability. But if you set that aside as a consequence of the past and you merely ask which type of vehicle has the greater probability of adding to national savings in the example that you gave, clearly one which is forced savings and, therefore, reduced consumption will add to household or personal savings and, therefore, to national savings.

If, however, you put it into the existing system and for the moment leave aside the question of changes in the trust fund, it is essentially a pay-as-you-go system, which does not create national savings. And, therefore, the two models are fundamentally different, and the complexity is how you go from here to a differing system, and to a very large extent, one's capacity to do that does rest with that issue of to what extent of the financial markets taking the $10 trillion-plus contingent liability and assumed its a cost or debt of the Government and have set long-term U.S. Treasury interest rates in the context that that is their target of what the

supply of debt is and, hence, that which moves the price and not the $4 trillion, which is the debt to the public, which is what changes with the unified budget balance.

Senator BENNETT. Well, I run a business, and you focus on cashflow. And I remember very clearly the speech by the President of the United States who said we are going to include surpluses in the Social Security account as part of the overall cashflow. His name was Lyndon Johnson, and it was during the time he was discussing the Great Society. And Republicans were claiming that he was running a budget deficit, and he said, No, we are not running a budget deficit because we have this extra money coming into Social Security. I remember that speech very clearly because I was in town and involved in that at the time. And ever since we went to a unified budget, on a cashflow basis the surpluses in Social Security have reduced the cash needs of the Government to meet its obligations.

Starting in 2008, that will begin to stop as the Social Security surplus will begin to fall in the face of the demographic arrival of the baby-boomers.

Chairman GREENSPAN. I think that what happens, however, is that the rate of increase falls and, indeed, at 2018 is the issue of when—

Senator BENNETT. That is right.

Chairman GREENSPAN. —taxes fall below benefits. But you are quite right. When you get into 2008, you begin to see the leading edges effect, but because we still have—I think it is $150 billion per year additions to the OASI surplus, that first has to go to zero.

Senator BENNETT. Yes, sure. That is right. But in terms of the unified budget, the amount that we can get—"we" being the Government as a whole—from Social Security to deal with the unified budget deficit begins to decrease in 2008.

Chairman GREENSPAN. That is correct.

Senator BENNETT. And it becomes—when it gets to 2018 or 2020—again, economic forecasts are never exactly accurate. When it gets to that point, we will already on a unified budget point of view have had to raise our external borrowing, whether it be Senator Stabenow's concern of China or whatever, to make up the amount that we were not getting from the Social Security. It will begin to produce a cashflow problem.

When it crosses the line, we will have to borrow that much more because at that point the Social Security trust fund will come to the Government and say redeem this bond, and the Government will have to redeem the bond. It is a legitimate claim on the Government. And then the Government says, in order to redeem that bond, we will sell a bond to the Japanese or the Europeans, or whoever, so that we can have the money to redeem that bond. At that point the interest on the bond to the Japanese or the Europeans will hit the unified budget pressure, cashflow pressure, differently than the interest on the Social Security bond. Isn't that true?

Chairman GREENSPAN. It depends on how the accounting goes. Remember, what is going to happen in 2008, I believe, is you begin to get the extent of the Social Security surplus, which is part of the unified surplus. That begins to decline.

Senator BENNETT. Right.

Chairman GREENSPAN. And you are quite correct, it means that less and less is being added to the fund which reduces the amount of borrowing that would be required. At 2018, if you believe the numbers, what happens is that the Social Security nonmarketable issues have to be converted to marketable, and they are sold.

The issue of interest payment, remember, refers to interest outside the intragovernmental transfers, and I do not think that you get a significant interest rate effect there, but you do get the issue that you are pointing out.

Senator BENNETT. You do not get a significant rate difference, but you get a significant cashflow difference, because the intragovernment transfers—the interest obligation is an intragovernment transfer, and you do not have to come up with the cash for it. But once you have sold a bond on the public market to replace the bond that is an intragovernment transfer, that interest payment has to be met in cash rather than the intragovernment transfer.

Chairman GREENSPAN. That is part of the whole issue of the Social Security system going from accumulating surpluses to then creating deficits.

Senator BENNETT. Sure.

Chairman GREENSPAN. But the point that I think is a more important and critical issue is that even those accumulations of surpluses are far short of anything that requires the full funding and that while you can be concerned about the mechanics, I think quite properly, of what is happening, let us not lose sight of the fact that the real problem is not that we are going from a $150 billion annual OASI surplus. The problem is that the number is not hugely larger and building up the——

Senator BENNETT. My time is up, Mr. Chairman. The only point I want to leave us with is that if we do nothing, as some are suggesting, we have still got to find several trillion dollars of additional cash. So when we say, gee, if we do the private accounts, we are going to have to find some cash, that is a transition cost. The point is if we do not do anything, we have to find some cash.

Chairman GREENSPAN. It is the same cash.

Senator BENNETT. Yes. Thank you.

Chairman SHELBY. Senator Bayh.

Senator BAYH. Chairman Greenspan, thank you for your patience today and your testimony. I apologize for shuttling in and out. We are having a simultaneous hearing in the Intelligence Committee on global threats to the Nation's national security. So we are trying to deal with both our physical security as well as our economic prosperity and security today. And I appreciate your contributions to the latter. And I might ask at the end of my questioning about the intersection between these two things.

My first question deals with the deficit, and some comments that you made recently, I think at a foreign forum of some kind, about the voices of fiscal responsibility stirring here in our Nation's capital. When I read those comments, I was inclined to think it might be the triumph of hope over experience, but I was interested to see you say it, nonetheless.

So my question involves this: There are, as you know, skeptics who have not heard those voices yet. One, in fact, referred to the

budget proposal as a Swiss cheese, more interesting for its holes than anything else. And so I would like to ask you, when we look back on this year and we can quantify the size of the deficit for this year, what number would tell you that it was something more than a siren song, that, in fact, it is true fiscal harmony stirring? I think the budget deficit this last year was $412 billion. When we look back, you know, a year or so from now, what figure would you look at and you would conclude those voices were more than just rhetoric but, in fact, had been put into effect?

Chairman GREENSPAN. There are two aspects to this. One is the short term, going out to, say, 2008 and then there is the post-2008 issue. The most important thing would be to look at——

Senator BAYH. I am just looking for accountability to hold all of us, the executive branch, the legislative branch, to some benchmark of performance.

Chairman GREENSPAN. I have been traumatized by Senator Bennett saying forecasts do not work out for 6 months, so I am trying to avoid making a forecast out beyond 6 months.

I think that, first of all, if the deficit as a percent of GDP does not go down, I think we are going into the 2008 are forward period poorly positioned.

Senator BAYH. Do you have a figure in terms of percentage of GDP you would look at to——

Chairman GREENSPAN. I would just as soon not put a number because it depends on so many different things, and that number in and of itself is——

Senator BAYH. Unlike the rest of us, Mr. Chairman, you will have the luxury of reentering the private sector by that time. So you perhaps have some more liberty to try and quantify these things.

Chairman GREENSPAN. I would say that whatever it is we do in the short-run, unless we start getting serious about the longer-run problems, I think we are going to run into them and be poorly positioned to effectively handle them without very significant problems.

Senator BAYH. At some point when you feel comfortable, in some forum, it really would help us to try and have some benchmarks of performance against which we can judge all of ourselves, both sides of the aisle, all branches of Government. As you know, it is easy to talk about these things. It is a lot more difficult to implement them and then hold ourselves to some kind of standard.

Chairman GREENSPAN. Well, let me tell you one of the reasons I hesitate: It is that the unified budget is not the be-all and end-all of a measure of what Government is doing because it is ultimately supposed to give us a judgment of the allocation of real resources essentially preempted by the Federal Government or, in fact, added if there is a surplus. And the trouble is there are other ways in which Government can preempt resources, either by regulation, by guarantees, which are not fully accounted for in the budget, by any of a number of different legal forms of preemption of property and the like. So you cannot take only that as a measure of what the overall issue is or its impact on interest rates.

At the end of the day, the standard of how well we are doing really gets to the question of how have we financed this and what are we doing. The financial markets will tell you very quickly

whether there is something wrong with the budget processes, and rather than, say, get somebody to forecast and say this is the standard, I will assure you the far more useful standard is watching what is happening to long-term U.S. Treasury rates. If long-term U.S. Treasury rates are behaving well, it is saying you do not have a significant problem over the maturity of Treasury instruments, most of the maturity. If they start to behave poorly, the markets are sending a signal which I think it is very crucial that the Congress be aware of.

Senator BAYH. I agree. This is a longer discussion. I am afraid that if we wait—many observers, including myself, have been surprised the markets have not reacted more than they have to date. And I am afraid, as you know, market psychology being what it is, if we reach that tipping point, it may require more difficult steps to turn around than would be necessitated if we act sooner rather than later.

But let me get to a second question, Mr. Chairman. I think you know what I am driving at here. I am looking for some benchmarks of performance against which to try and hold the Government accountable when it comes to the deficit, understanding that regulatory policy and other things also contribute to economic performance.

Chairman GREENSPAN. One standard is if the unified budget deficit is 2 percent of GDP or less, it stabilizes the ratio of debt to GDP. So if you are looking at a straightforward numerical type, that is not a bad one. But, again, I want to caution you that it is a little simplistic, and I would not want to press it too far.

Senator BAYH. We should be so fortunate as to get to 2 percent of GDP, and we could argue about the other factors that might come into play. But thank you.

My second question, Chairman, perhaps you can help me—and I again apologize I missed some of the discussion because I had to attend the other hearing, and I am going to have to return to the other hearing—with some cognitive dissonance I am having over some of the debate here in Washington where, as many of my colleagues and I think you alluded to, quite rightly, we have this tremendous demographic challenge that is going to affect our fiscal position coming along. We have the underlying—the current budget problem, both of which are going to—the latter of which necessitates borrowing in the short-run, the latter of which is going to necessitate perhaps, if nothing is done, large and ongoing borrowing in the long-run. So we have that message that we have, you know, serious fiscal challenges that we have to face that may necessitate large amounts of borrowing.

At the same time, in the President's budget proposal we have additional tax cuts included. So apparently we are in such good fiscal condition that we can afford additional tax cuts, and as you have convinced me in the past, there is no such thing as a self-financing tax cut. We can argue about the percentage of growth that is occasioned by that, but, you know, there is a loss of revenue.

How do we reconcile these two positions? On the one hand, we are facing large and perhaps ongoing needs to borrow, but, on the other hand, we are flush enough with cash we can continue with additional tax cuts at the same time.

Chairman GREENSPAN. The way I would do it is there are certain of the tax cuts which I view as enhancing economic growth and, therefore, enhancing the revenue base. I have been arguing, since the PAYGO has been dropped in September 2002, that we should restore it as quickly as possible. The way I would reconcile my own position is that I think maintaining the reduction in taxes on dividends, which essentially partially integrates the individual and corporate taxes, eliminating part of the double taxation on dividends, I think is a good thing. But because I hold to the position that we should be adhering to PAYGO, I think it is necessary to offset it by other means as required by the law were PAYGO still in effect.

But I do not think you can essentially eliminate all tax cuts or increased spending because you are endeavoring to get the budget deficit down. You would probably argue, as I would, that there are a number of things which should be done even if we have this type of problem, but that does not mean that we should not be focusing on the goal of getting the deficit down, especially as quickly as we can before we begin to run into the really serious problems maybe in 2012, 2014. We do not have a great deal of time to do it.

Senator BAYH. Mr. Chairman, do I have time for just one more?

Chairman SHELBY. Hurry.

Senator BAYH. Very quickly. I want to ask you about our comparative advantage looking forward, Mr. Chairman. You have been a long-time observer of our economy. Here shortly you are going to be liberated from the burdens of public responsibility and might have a chance to reflect at greater length. But I was struck in December when my wife and I were in India, in Bangalore, and visited General Electric, who employs 6,000 people in our State. One of their worldwide innovation centers was located in Bangalore. There is a biotech company there that heretofore has been only engaged in generic production but is now getting into proprietary discover.

Our economy—and my State is a good example. A hundred years ago, most people were employed in agriculture. We transitioned into manufacturing, which peaked in the 1950's. We then transitioned into a service sector economy.

As succinctly as you can, how would you define, looking forward, our comparative advantage in a world in which our competitors—India, China, and the others—are rapidly moving up the innovation curve?

Chairman GREENSPAN. I think, Senator, the question you are asking is what creates the wealth of nations. And as best I can judge, our comparative advantage has been a combination of our Constitution and the skills of our workforce. It is not raw materials. It is not anything other than what is in people's heads and the laws of the land, the rule of law, the protection of property rights, and a general view on the part of the rest of the world that this is a wonderful place in which to invest because property rights are sacrosanct to as extent that they are not elsewhere.

Remember, there is an awful lot of investment that has come into the United States. We have moved a lot of our investment abroad, but a lot of investment has been moving here as well. But the bottom line is that the only thing that we have which maintains our standard of living, that which creates essentially our abil-

ity to have a level of income which is a claim against the rest of the world, the reason we are able to do that is we create things, the ideas that we have. And we have an economic system which capitalizes on the way those ideas function, which most of the rest of the world, indeed perhaps all of it, cannot match.

That is the reason why I have argued that our education problems are serious because it is right at the root of where our, as you put it, comparative advantage is.

Senator BAYH. So our comparative advantage lies in the rule of law that we have and in the quality of our people.

I would just conclude by thanking you again, Mr. Chairman, and observe, Chairman Shelby, I well recall Chairman Greenspan in my previous incarnation, and I think, Corzine, this gets to your point, and perhaps Tom Carper was there. I well recall your addressing a meeting of the National Governors Association many years ago on the issue of productivity growth and mentioning that one of the most important things we could do to increase productivity was to enhance the skill level of our people, and that would help us close the increasing gap between the haves and have-nots in our society and, indeed, improve the comparative advantage of our society as a whole.

Thank you for your words, and the indulgence of my colleagues.

Chairman SHELBY. Thank you, Senator Bayh.

Senator Corzine, thank you for being so patient.

Senator CORZINE. Thank you, Mr. Chairman.

I want to get to the integration of this issue of wealth disparities or income disparities and the Social Security question. First of all, I have a couple of just housekeeping things.

Do you recall what the 1983 Commission used as far as a time horizon to figure out its suggestions on solving the then Social Security crisis? Was it an indefinite one, or was it an actuarial——

Chairman GREENSPAN. No, it was 75 years, through 2058.

Senator CORZINE. As I recall, and so you are now suggesting that that was the wrong——

Chairman GREENSPAN. No, I am saying that it was wrong back then, but the real problems which would be confronted as a consequence of that were still 25 years off.

Senator CORZINE. There is a huge difference between 3.7 and 10 whatever and——

Chairman GREENSPAN. The 3.7, let us put it this way, any defined benefit program goes to perpetuity of necessity, so that the 75-year is an artifice. I am not sure what it means. We knew that back in 1983, but that was the historical conventional——

Senator CORZINE. Well, it does allow for thinking about financing mechanisms that are within the mind-set of most of the people who are in that workforce today, and a whole bunch of them that are not even born yet. And so it strikes me that one could reasonably—and I think actuarials often do—think in some finite timeframe so that you are not actually trying to solve some problem that is——

Chairman GREENSPAN. But Senator, I think it works fine for the cash pay-as-you-go system, but it does nothing to create the savings which creates the capital investment which creates the goods and services that——

Senator CORZINE. I could not agree more. I just wanted to know whether in 1983 we were using 75.

Senator SARBANES. Will you yield for a question?

Senator CORZINE. Sure.

Senator SARBANES. In 1983, did you say that in a few months' time, the money being paid into the Social Security trust fund would not be sufficient to pay the benefits?

Chairman GREENSPAN. Correct. What happened would be that the trust fund was essentially running down to zero, which statutorily required that we pay benefits only to the extent that revenues came in.

Senator SARBANES. So that is a situation comparable to what is now forecast to happen in 2050, correct?

Chairman GREENSPAN. Well, 2042 or 2052, yes.

Senator SARBANES. Okay.

Senator CORZINE. I just want to reiterate, and this won't take a second, but one is not arguing that the financing structure that is being suggested by the President with private accounts is dealing with that solvency issue, whether you use 75 years or you use infinity?

Chairman GREENSPAN. No. You mean the private accounts by themselves, the personal accounts?

Senator CORZINE. When we were dealing with this problem in 1983—and I think Senator Reed quoted, "should not alter the fundamental structure of the Social Security program or undermine its fundamental principles," the fundamental principles being guaranteed benefits for the disabled, child and survivor benefits, and retirement.

I want to get at this because the fundamental principle is a social insurance program, not an investment program, not a defined benefit or a defined contribution program.

Chairman GREENSPAN. No. The question that you have to answer is whether or not you want to commit to that, irrespective of the source of revenue. Indeed, you know, we have actually done that. I cannot believe, and did not believe in 1983, that somehow or some way we would cut benefits. That was not something which, in my judgment, seemed credible at all. Nor do I believe that if the world were to emerge—and I think that Senator Bennett is right. The one thing we are sure of is it won't happen the way we are saying.

Senator CORZINE. I think all of us accept that.

Chairman GREENSPAN. But if it did, the chances of cutting benefits in 2042, for example, because we run out—I put that probability close to zero, if I could not find a lower number.

Senator CORZINE. It all depends on how you define that. I mean, I think in 1983 you talked about changing the timeframe in which people—we go on to extending the timeframe before benefits would be received. One person would look at that and say it is a benefit cut.

What I would like to get to is that the fundamental financing structure still has variables that you could adjust to deal with even the $10 trillion gap.

Chairman GREENSPAN. Oh, absolutely.

Senator CORZINE. So there are solutions and they are easier to implement if we do them sooner rather than later, which is what was done in 1983, which was to build up these surpluses. Unfortunately, we turned around and spent them for current expenses on the cashflow basis that Senator Bennett talked about, but there was a desire to prefund liabilities that was embedded in the recommendations.

We have prefunded them, but because of the reality of the unified budget, we have taken payroll taxes to pay for tax cuts or wars or whatever the expenditure or reduction of revenues has been. If I am not mistaken, just on an accounting basis, payroll taxes come in, they go out for some other purpose with a bunch of borrowing going on.

My real question is, because I think the fundamental principles are still sound, that there is need for social insurance on disability, child and survivor benefits, and for seniors. My own view is we may have to deal with the financing structure, and you have had great ideas in the past.

This is going to be hard for you to see, but actually the only thing that really counts—and I worry about this very deeply—is that because of a lot of the reasons you have talked about, skill sets and others, real earnings for the bottom decile in our country have actually declined in the last 4 years. They are flat for the 25th percentile. They are up a measly two-tenths of 1 percent for the median percentile, and they are a little bit better for the 75th percentile and the 90th percentile. I wonder what they are for the 1 percent. We did not have it on this chart. I suspect real earnings have gone up pretty well for the most skilled in our society.

But aren't we setting up a situation, if we take away guaranteed benefits, that the vast majority of people in this society are going to end up with less savings? Maybe we can have broad changes in our educational skill levels development in our society, but otherwise we are going to end up with a society that has less ability to save and we are talking about the guaranteed benefit.

Chairman GREENSPAN. Well, the guaranteed benefits are, I think, unrelated to this question which you raise with which I would agree, namely obviously the lower the level of income, the less capability——

Senator CORZINE. If the individuals do not have the capacity to save, then we get back to a situation that we have had in other periods in history where those most vulnerable in society do not have the ability to maintain an above-poverty standard of living, which is where we came from before Social Security was implemented both for children and the disabled.

Chairman GREENSPAN. But Social Security—it depends on whether you are discussing the Social Security for retirees. In other words, that is different. What I am trying to get at is the issue that you are raising with respect to the shortfall of incomes of those below the median or just above the median is——

Senator CORZINE. Fifty percent of the workforce.

Chairman GREENSPAN. Yes, it is the active workforce. To the extent that real wages fall in that area, one would presume that their savings rates fall as well because that is what people do when their incomes go down. I think the question of Social Security and the

guarantees and the like is a somewhat different issue. But I think there is also a very interesting question here.

Senator CORZINE. Well, that was the fundamental principle of Social Security, though, was to provide guaranteed benefits for all. That was the contract.

Chairman GREENSPAN. Well, it was mainly for retirees. We now, because we have DI, disability, which is a different program, we have a lot of people under OASI who are below the so-called retirement age. But the basic purpose is a retirement program.

Senator SARBANES. And survivorship, too.

Senator CORZINE. And survivorship.

Chairman GREENSPAN. That is the basic purpose of it. The problem here is I think we have to make some decisions on whether we want to make programs as social insurance or means-test programs and make them essentially for people who are in really serious difficulty.

Senator CORZINE. That is getting at a financial structural solution which you could put into any suggestion that would be independent of whether you had personal accounts.

Chairman GREENSPAN. I agree with that.

Senator CORZINE. Finally, I know my time is up, but you have, and I think appropriately so, said forced savings as you have described the private accounts.

Chairman GREENSPAN. It is forced in the sense that they should not be available for other than retirement purposes.

Senator CORZINE. Forced savings is not unlike forced savings at a national level with regard to taxes, I suppose. I mean, they are roughly the same equivalent with regard to getting to whether we have increased savings. If we run deficits and the Government is spending more than it is taking in, you end up with this declining savings rate or hole in our savings function.

But you do have choices and we have avoided those choices pretty clearly as we have built up these deficits in the last 4 years. And it strikes me that along the lines of what Senator Bayh was talking about you may not know what the right number is, but if you look at 2009 and beyond—and this is the point that I want to make—I hear this described as a $743 billion hole in the first 10 years in this transition to private accounts.

The fact is that allows for the fact that we are not doing anything between 2005 and 2009, and then we will get to 2009 and find out it is $1.4 trillion, like we found out on Medicare. We need to have some truth or precision in what it is we are comparing and contrasting when we are comparing these numbers. I am afraid that we are using multiple sets of books under the rubric of a unified budget.

I guess that is more of a statement than it is a question, but the fact is that somebody is going to say $735 billion doesn't meet the Greenspanian test of serious borrowing when, in fact, we are just avoiding the first 4 years and then we are going to start it in 2009. I just want to make sure we get that clear.

Chairman GREENSPAN. I think the issue essentially is that savings, as you know as well as I, doesn't create investment. Implicit in all of this is that the incentives for investment are there and that when you think in terms of taxation and how one creates the

savings, it is conceivable that you can create the savings, but regrettably at the same time so diffuse the incentives to invest that we will not get the capital assets we need to essentially produce the goods and services.

So proper balance here, I think, is quite important, and I think that it is an extraordinarily complex and difficult issue. We have known about the demographics for quite a long time, but we have never really addressed them. And it is only now that we are beginning to see the significance of how big the size of the hole is.

Senator CORZINE. Mr. Chairman, I——

Chairman SHELBY. Go ahead.

Senator CORZINE. That is true, but we have a Medicare problem, a Medicaid problem, a pension benefit guarantee problem. These figures, when you use the 75-year horizon, which I tend to do, I think an estimate we heard in the Budget Committee of something like $43 trillion. Even using a 75-year horizon, Social Security is 3.7 of that.

Chairman GREENSPAN. In fact, actually, I believe I have that number.

Senator CORZINE. We need to really make sure that we are looking at where the problem really is if we are going to be intellectually honest about getting at these issues.

Senator SARBANES. In fact, Chairman Greenspan, you said before this Committee in February, 2 years ago, "The really major fiscal problem is not Social Security. It is Medicare."

Chairman GREENSPAN. I agree with that.

Chairman SHELBY. Senator Carper.

STATEMENT OF SENATOR THOMAS R. CARPER

Senator CARPER. Thank you, Mr. Chairman.

Chairman Greenspan, welcome. Sometimes, when I speak to a group back in Delaware and I am the last speaker before they have a meal, I will say to them I am all that stands between you and your meal.

Chairman SHELBY. Maybe not. You have the two of us left here again.

Senator CARPER. Is that right?

When I have a witness who has been sitting for hours and hours testifying without a break and I am the last person to ask a question, I will say I am all that stands between you and a chance to visit the nearest restroom. I won't say that today, but I might say it on another occasion.

We have talked a lot about Social Security today, and I want to beat a dead horse—well, actually, a live horse. I want to ask you to go back in time with me about 23 or 24 years. I sit on another Committee called Governmental Affairs and Homeland Security. Last August, among our witnesses were Governor Kean and former Congressmen Lee Hamilton, and they had come to us that day to present the recommendations of a bipartisan commission, 10 members, five appointed by the President and five appointed by the Democratic leadership of the Congress.

They recommended to us unanimously that we take 44 different steps as a follow-up to the attacks of September 11. I remember saying to Governor Kean and Congressman Hamilton, how did you

do this? In a politically charged time and arena, with a diverse group of people on your commission, how did you fashion a bipartisan consensus on all these issues? There were literally 10 to zero votes on all of them.

They said in response what happened is that the two of them, the Chair and the Vice Chair, one appointed by the President, the other appointed by Senator Daschle and Congresswoman Pelosi—they said we spent a lot of time together over the last 2 years and we got to know each other and developed a sense of trust for each, and friendship. And out of that bond came an environment for the rest of the commission to band together and to join together, setting aside their partisan differences, just to work to try to do what was right for the country.

I was elected to the House in 1982 and joined a young Mr. Shelby down there. I like to say I knew him when he was a Democrat. We were both on the House Banking Committee. We used to work out in the House gym together. Now, we work out in the Senate gym together.

When I joined him, I found out on January 3, 1983, which was the day I was sworn into the House, that we had a crisis with respect to Social Security and that we needed to do something about it. I had always heard talk about it. I talked a little bit about it when I ran in 1982 for the House, but I found that in 1983 this was real and there was a real crisis and we faced the possibility of running out of money.

Fortunately, you and a number of other people had been, I think, appointed by President Reagan and I think by Tip O'Neill, and maybe by Robert Byrd. Whoever was the Democratic Leader of the Senate, I think, made appointments to another bipartisan commission that worked, I believe, throughout 1982 and came to us in 1983 with a host of recommendations.

The way I like to describe it is we joined hands, the House and Senate Democrats and Republicans, and we either jumped off the bridge or we drank the Kool-Aid together, and end up adopting lock, stock, and barrel all your recommendations. We passed them and set Social Security on a more sound footing for several more decades.

What I want to ask you is really the same question I asked Lee Hamilton and to Kean. I think you were the Chair or the Vice Chair or the Co-Chair of the commission, as I recall. How were you able to create at that time a unanimity across party lines on a politically charged, difficult issue to be able to present to us a consensus perspective and recommendations that we adopted?

Chairman GREENSPAN. Well, I would hope so. It was done actually in two ways. The first was that one of the senior commissioners was an expert and appointee of Tip O'Neill, Bob Ball, who is still around.

Senator CARPER. Yes.

Chairman GREENSPAN. He and I merged in the sense that he would represent the Speaker and report back to him about what the various choices were, and I would report back to Jim Baker and President Reagan. And so we kept a line going between the decisionmakers in the White House and the Congress as the commission moved forward from position to position, and in a sense

worked concurrently both within the commission and in the Congress and in the White House so that we did not find that at the end of the day the commission came out one place and there was no support back with the Speaker or the President.

So that occurred, and then at the end we came up with a report, and Bob Ball and I went up to the Ways and Means Committee to testify on the report and we indicated that it is an up-or-down vote. I said to Ball, when the Republicans ask you a question, I will answer it and I hope you will answer the questions that the Democrats ask me.

It worked remarkably well, and the reason it did is, similar to the Kean-Hamilton relationship. Remember, we had Pat Moynihan and Claude Pepper and Bob Dole, and I do not know whether Jack Heinz was on that.

Senator CARPER. He was.

Chairman GREENSPAN. It was a pretty formidable group of people and what we eventually decided was that the commission report was a compromise, and that it was up or down. In other words, we argued that this should not be subject to amendment because if it were, it would unwind the whole compromise. And with very minor exceptions, the Senate and the House both agreed with that, and what came out was essentially the commission report preagreed to by the Speaker of the House—and I think Jake Pickle was at Ways and Means at that time—and President Reagan. So, essentially, the agreement did not occur as a commission report and then it went to the Congress. I suspect that rarely, if ever, works.

Senator CARPER. Would you just refresh my memory. My recollection is that President Reagan appointed some of the members, that Tip O'Neill appointed some of the members, and that perhaps the Democratic Leader of the Senate appointed some of the members. Do you recall?

Chairman GREENSPAN. I think that is correct. It was a national commission which would be presented in the form that you suggest, Senator.

Senator CARPER. And my recollection is the commission was created maybe in the second half of 1981, and that you worked through 1982 and presented your recommendations to us in 1983.

Chairman GREENSPAN. I think that is probably correct. I do not remember the actual date it began.

Senator CARPER. Do you think that the way that the commission members were selected—that is, some by the President and the Republicans, and some by some of the Congressional leaders who in that case were Democrats—do you think that had maybe some bearing on the fact that you were able to bring a consensus proposal to us?

Chairman GREENSPAN. You know as well as I, there was a far greater degree of comity back then, and I think that what we need is a good deal more of that. But primarily what you need is a bipartisan group of people getting together who have the capacity not only to reach a compromise agreement, which means that there are parts of that agreement with which everyone in the room disagrees and present it as an up-or-down type of issue. You need a mecha-

nism in which that occurs because you cannot have a particular commission report subject to continuous revision.

I remember on another commission that I was on, one of the members said I would like to agree with you at this particular stage, but since this is not the final negotiation, I do not want to state my position at this particular point. And it was a perfectly sensible operation, and indeed we did not get very far basically because of that problem.

So you have to figure a way in which the final decisions are made concurrently with the commission and the Congress, because if you leave those types of results, especially things which are compromises, they get amended to death and it unwinds the whole agreement.

Senator CARPER. Mr. Chairman, thanks very, very much.

Chairman SHELBY. Thank you for bringing that up. Chairman Greenspan, we need to find another Chairman Greenspan in the making out there somewhere to put this type of thing together.

I have a couple of questions and I will try to be quick.

One of the Social Security reform options—and there are many out there and there will probably be many more—that has been mentioned is changing the way that benefits are adjusted over time, or indexing. Today, it is my understanding that the indexing is based on wages, mainly, as opposed to an inflation-based index.

What impact would such a change to an inflation-based index have on the financial soundness of the Social Security program in the years to come?

Chairman GREENSPAN. Well, Senator, currently we index the initial benefit.

Chairman SHELBY. Explain how that works.

Chairman GREENSPAN. Well, what they do is they effectively take an average of wages over a long period of time and they construct effectively a specific benefit that is the initial benefit.

Chairman SHELBY. For an individual.

Chairman GREENSPAN. For the individual.

Chairman SHELBY. Okay.

Chairman GREENSPAN. The intial benifit is thereafter indexed by inflation, so that the real benefit doesn't change after retirement, whether it is at 62 or 65. And trying to get the average wage as the index creates a much higher initial benefit than were you to use prices retrospectively and the reason is that wages will reflect productivity increases, whereas prices will not.

If you, however, now substitute prices for wages in creating the initial benefit, you will have essentially a benefit which, whereas now its ratio to your previous income has been stable, will begin to fall through time. And if you make a full adjustment going from a so-called wage-adjusted initial benefit to a price-adjusted initial benefit——

Chairman SHELBY. Initial benefit is what you are talking about?

Chairman GREENSPAN. I am sorry?

Chairman SHELBY. You are talking about initial benefit.

Chairman GREENSPAN. Initial benefit. You effectively wipe out all of that $10 trillion that I have been mentioning.

Chairman SHELBY. Over many years?

Chairman GREENSPAN. Yes, but as a number of people have mentioned, the replacement ratio, which is not around 40 percent, as I recall, starts to go down materially. One of the issues that is involved here is that with the demographics that we are looking at, in most of the scenarios the replacement rate would go down in any event.

Chairman SHELBY. Any event.

Chairman GREENSPAN. And the only issue is to what extent. So it is not a question of being capable of holding that 40 percent indefinitely without causing problems in the standards of living of the active working population at that time.

Chairman SHELBY. Chairman Greenspan, what about if you are 55 years of age and you have just retired? If they were to go to the inflation-based index for the future, what would that do to the retirees? Or let's say you are drawing Social Security now and you are 70 years of age. Let's say you are drawing Social Security now. What would that do to the future?

Chairman GREENSPAN. It would have no effect.

Chairman SHELBY. No effect on the people that are retired?

Chairman GREENSPAN. It is the initial benefit.

Chairman SHELBY. Initial when you retired, isn't it?

Chairman GREENSPAN. I am sorry?

Chairman SHELBY. When you initially start computing it?

Chairman GREENSPAN. Yes. Once you are retired and you are getting a benefit, that is indexed by the Consumer Price Index and that is not involved in this change, as I understand it.

Chairman SHELBY. But it is something that as things are put on the table we all should maybe consider anyway. Is that correct?

Chairman GREENSPAN. I think that it is one of the most effective ways to come to grips at closing the actual gap between expected revenues and expected benefits. There are a lot of other things you can do, but the impact is fairly substantial from that change.

Chairman SHELBY. I want to touch on one last thing. Your written testimony Mr. Chairman, notes that the low national savings rate could eventually slow the rise in living standards either by increasing the burden of servicing U.S. foreign debt or by impinging on domestic capital formation.

To what extent will the anticipated further increases in interest rates affect this possibility?

Chairman GREENSPAN. Well, it has two effects, in a sense. One, if real interest rates rise, one would presume that the incentives to invest would fall. It will concurrently presumably attract funds into the United States because of the rates of return. I do not think you could make a judgment as to what the overall impact is, but it is one of the issues.

Far more important, for example, is the differential growth rates between the trading partners. Clearly, the exchange rate has an impact. Interest rates have a number of different effects, but they are rarely critical in the issue of determination of the current account balance.

Chairman SHELBY. Mr. Chairman, last week Atlanta Federal Reserve President Jack Gwynn, in an interview with *The Wall Street Journal,* said, as I understand it, that the central bank could soon

remove the word “measured” and the word “accommodation” from the official statement.

What is your view as to whether such a change in the FOMC’s message is likely, and what would such an action tell us about the likely course of action in the future as far as interest rate increases or movement?

Chairman GREENSPAN. Well, I think what President Gwynn was saying was obvious. We are not going to have the same statement in perpetuity. At some point, it is going to change. I cannot really comment on when and under what conditions because that is a decision that the Federal Open Market Committee has to make.

Chairman SHELBY. Mr. Chairman, thank you for your appearance here today and we will see you a lot probably before the year is over. Thank you very much.

Chairman SHELBY. The hearing is adjourned.

[Whereupon, at 1:01 p.m., the hearing was adjourned.]

[Prepared statement, response to written questions, and additional material supplied for the record follow:]

PREPARED STATEMENT OF SENATOR WAYNE ALLARD

Thank you, Chairman Greenspan for coming to the Senate today to share the Federal Reserve's Semi-Annual Monetary Policy Report to the Congress. This Committee and the Congress greatly benefit from your reports and visits, and the expertise that you offer to us and the Country.

The economy is healthy and expanding, with GDP having increased in both the third and fourth quarters of 2004. Productivity and output both increased as well during the last months of 2004. We have even seen recent increases in exports and a decrease in the U.S. current account deficit.

The Federal Reserve Board has done a good job at monitoring monetary policy and economic indicators in order to see that policy remains accommodative to the ebbs and flows of the U.S. economy. Their steadfastness in recognizing the immediate monetary needs and adjusting policy accordingly is to be commended. Dr. Greenspan, I appreciate your commitment to this Committee, the Congress, and this country. I look forward to hearing your evaluation and insights on monetary policy, the condition of the economy, and your forecast for the next several months. Thank you, Chairman Greenspan for coming to the Senate today to share the Federal Reserve's Semi-Annual Monetary Policy Report to the Congress. This Committee and the Congress greatly benefit from your reports and visits, and the expertise that you offer to us and the Country. The economy is healthy and expanding, with GDP having increased in both the third and fourth quarters of 2004. Productivity and output both increased! as well during the last months of 2004. We have even seen recent increases in exports and a decrease in the U.S. current account deficit. The Federal Reserve Board has done a good job at monitoring monetary policy and economic indicators in order to see that policy remains accommodative to the ebbs and flows of the U.S. economy. Their steadfastness in recognizing the immediate monetary needs and adjusting policy accordingly is to be commended.

Dr. Greenspan, I appreciate your commitment to this Committee, the Congress, and this country. I look forward to hearing your evaluation and insights on monetary policy, the condition of the economy, and your forecast for the next several months.

PREPARED STATEMENT OF ALAN GREENSPAN

CHAIRMAN, BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

FEBRUARY 16, 2005

Mr. Chairman and Members of the Committee, I am pleased to be here today to present the Federal Reserve's Monetary Policy Report to the Congress. In the 7 months since I last testified before this Committee, the U.S. economic expansion has firmed, overall inflation has subsided, and core inflation has remained low.

Over the first half of 2004, the available information increasingly suggested that the economic expansion was becoming less fragile and that the risk of an undesirable decline in inflation had greatly diminished. Toward mid-year, the Federal Reserve came to the judgment that the extraordinary degree of policy accommodation that had been in place since the middle of 2003 was no longer warranted and, in the announcement released at the conclusion of our May meeting, signaled that a firming of policy was likely. The Federal Open Market Committee began to raise the Federal funds rate at its June meeting, and the announcement following that meeting indicated the need for further, albeit gradual, withdrawal of monetary policy stimulus.

Around the same time, incoming data suggested a lull in activity as the economy absorbed the impact of higher energy prices. Much as had been expected, this soft patch proved to be short-lived. Accordingly, the Federal Reserve has followed the June policy move with similar actions at each meeting since then, including our most recent meeting earlier this month. The cumulative removal of policy accommodation to date has significantly raised measures of the real Federal funds rate, but by most measures, it remains fairly low.

The evidence broadly supports the view that economic fundamentals have steadied. Consumer spending has been well-maintained over recent months, buoyed by continued growth in disposable personal income, gains in net worth, and accommodative conditions in credit markets. Households have recorded a modest improvement in their financial position over this period, to the betterment of many indicators of credit quality. Low interest rates and rising incomes have contributed to a decline in the aggregate household financial obligation ratio, and delinquency and charge-off rates on various categories of consumer loans have stayed at low levels.

The sizable gains in consumer spending of recent years have been accompanied by a drop in the personal saving rate to an average of only 1 percent over 2004—a very low figure relative to the nearly 7 percent rate averaged over the previous three decades. Among the factors contributing to the strength of spending and the decline in saving have been developments in housing markets and home finance that have spurred rising household wealth and allowed greater access to that wealth. The rapid rise in home prices over the past several years has provided households with considerable capital gains. Moreover, a significant increase in the rate of single-family home turnover has meant that many consumers have been able to realize gains from the sale of their homes. To be sure, such capital gains, largely realized through an increase in mortgage debt on the home, do not increase the pool of national savings available to finance new capital investment. But from the perspective of a! n individual household, cash realized from capital gains has the same spending power as cash from any other source.

More broadly, rising home prices along with higher equity prices have outpaced the rise in household, largely mortgage, debt and have pushed up household net worth to about 5½ times disposable income by the end of last year. Although the ratio of net worth to income is well below the peak attained in 1999, it remains above the long-term historical average. These gains in net worth help to explain why households in the aggregate do not appear uncomfortable with their financial position even though their reported personal saving rate is negligible.

Of course, household net worth may not continue to rise relative to income, and some reversal in that ratio is not out of the question. If that were to occur, households would probably perceive the need to save more out of current income; the personal saving rate would accordingly rise, and consumer spending would slow.

But while household spending may well play a smaller role in the expansion going forward, business executives apparently have become somewhat more optimistic in recent months. Capital spending and corporate borrowing have firmed noticeably, but some of the latter may have been directed to finance the recent backup in inventories. Mergers and acquisitions, though, have clearly perked up.

Even in the current much-improved environment, however, some caution among business executives remains. Although capital investment has been advancing at a reasonably good pace, it has nonetheless lagged the exceptional rise in profits and internal cashflow. This is most unusual; it took a deep recession to produce the last such configuration in 1975. The lingering caution evident in capital spending decisions has also been manifest in less-aggressive hiring by businesses. In contrast to the typical pattern early in previous business-cycle recoveries, firms have appeared reluctant to take on new workers and have remained focused on cost containment.

As opposed to the lingering hesitancy among business executives, participants in financial markets seem very confident about the future and, judging by the exceptionally low level of risk spreads in credit markets, quite willing to bear risk. This apparent disparity in sentiment between business people and market participants could reflect the heightened additional concerns of business executives about potential legal liabilities rather than a fundamentally different assessment of macroeconomic risks.

Turning to the outlook for costs and prices, productivity developments will likely play a key role. The growth of output per hour slowed over the past half year, giving a boost to unit labor costs after 2 years of declines. Going forward, the implications for inflation will be influenced by the extent and persistence of any slowdown in productivity. A lower rate of productivity growth in the context of relatively stable increases in average hourly compensation has led to slightly more rapid growth in unit labor costs. Whether inflation actually rises in the wake of slowing productivity growth, however, will depend on the rate of growth of labor compensation and the ability and willingness of firms to pass on higher costs to their customers. That, in turn, will depend on the degree of utilization of resources and how monetary policymakers respond. To date, with profit margins already high, competitive pressures have tended to limit the extent to which cost pressures have ! been reflected in higher prices.

Productivity is notoriously difficult to predict. Neither the large surge in output per hour from the first quarter of 2003 to the second quarter of 2004, nor the more recent moderation was easy to anticipate. It seems likely that these swings reflected delayed efficiency gains from the capital goods boom of the 1990's. Throughout the first half of last year, businesses were able to meet increasing orders with management efficiencies rather than new hires. But conceivably the backlog of untapped total efficiencies has run low, requiring new hires. Indeed, new hires as a percent of employment rose in the fourth quarter of last year to the highest level since the second quarter of 2001.

There is little question that the potential remains for large advances in productivity from further applications of existing knowledge, and insights into applications not even now contemplated doubtless will emerge in the years ahead. However, we have scant ability to infer the pace at which such gains will play out and, therefore, their implications for the growth of productivity over the longer-run. It is, of course, the rate of change of productivity over time, and not its level, that influences the persistent changes in unit labor costs and hence the rate of inflation.

The inflation outlook will also be shaped by developments affecting the exchange value of the dollar and oil prices. Although the dollar has been declining since early 2002, exporters to the United States apparently have held dollar prices relatively steady to preserve their market share, effectively choosing to absorb the decline in the dollar by accepting a reduction in their profit margins. However, the recent somewhat quickened pace of increases in U.S. import prices suggests that profit margins of exporters to the United States have contracted to the point where the foreign shippers may exhibit only limited tolerance for additional reductions in margins should the dollar decline further.

The sharp rise in oil prices over the past year has no doubt boosted firms' costs and may have weighed on production, particularly given the sizable permanent component of oil price increases suggested by distant-horizon oil futures contracts. However, the share of total business expenses attributable to energy costs has declined appreciably over the past 30 years, which has helped to buffer profits and the economy more generally from the adverse effect of high oil and natural gas prices. Still, although the aggregate effect may be modest, we must recognize that some sectors of the economy and regions of the country have been hit hard by the increase in energy costs, especially over the past year.

Despite the combination of somewhat slower growth of productivity in recent quarters, higher energy prices, and a decline in the exchange rate for the dollar, core measures of consumer prices have registered only modest increases. The core PCE and CPI measures, for example, climbed about 1¼ and 2 percent, respectively, at an annual rate over the second half of last year.

All told, the economy seems to have entered 2005 expanding at a reasonably good pace, with inflation and inflation expectations well anchored. On the whole, financial markets appear to share this view. In particular, a broad array of financial indicators convey a pervasive sense of confidence among investors and an associated greater willingness to bear risk than is yet evident among business managers.

Both realized and option-implied measures of uncertainty in equity and fixed-income markets have declined markedly over recent months to quite low levels. Credit spreads, read from corporate bond yields and credit default swap premiums, have continued to narrow amid widespread signs of an improvement in corporate credit quality, including notable drops in corporate bond defaults and debt ratings downgrades. Moreover, recent surveys suggest that bank lending officers have further eased standards and terms on business loans, and anecdotal reports suggest that securities dealers and other market-makers appear quite willing to commit capital in providing market liquidity.

In this environment, long-term interest rates have trended lower in recent months even as the Federal Reserve has raised the level of the target Federal funds rate by 150 basis points. This development contrasts with most experience, which suggests that, other things being equal, increasing short-term interest rates are normally accompanied by a rise in longer-term yields. The simple mathematics of the yield curve governs the relationship between short- and long-term interest rates. Ten-year yields, for example, can be thought of as an average of 10 consecutive 1 year forward rates. A rise in the first-year forward rate, which correlates closely with the Federal funds rate, would increase the yield on 10-year U.S. Treasury notes even if the more-distant forward rates remain unchanged. Historically, though, even these distant forward rates have tended to rise in association with monetary policy tightening.

In the current episode, however, the more-distant forward rates declined at the same time that short-term rates were rising. Indeed, the tenth-year tranche, which yielded 6½ percent last June, is now at about 5¼ percent. During the same period, comparable real forward rates derived from quotes on Treasury inflation-indexed debt fell significantly as well, suggesting that only a portion of the decline in nominal forward rates in distant tranches is attributable to a drop in long-term inflation expectations.

Some analysts have worried that the dip in forward real interest rates since last June may indicate that market participants have marked down their view of economic growth going forward, perhaps because of the rise in oil prices. But this interpretation does not mesh seamlessly with the rise in stock prices and the narrowing of credit spreads observed over the same interval. Others have emphasized the sub-

dued overall business demand for credit in the United States and the apparent eagerness of lenders, including foreign investors, to provide financing. In particular, heavy purchases of longer-term Treasury securities by foreign central banks have often been cited as a factor boosting bond prices and pulling down longer-term yields. Thirty-year, fixed-rate mortgage rates have dropped to a level only a little higher than the record lows touched in 2003 and, as a consequence, the estimated average duration of outstanding mortgage-backed securities has shortened appreciably ! over recent months. Attempts by mortgage investors to offset this decline in duration by purchasing longer-term securities may be yet another contributor to the recent downward pressure on longer-term yields.

But we should be careful in endeavoring to account for the decline in long-term interest rates by adverting to technical factors in the United States alone because yields and risk spreads have narrowed globally. The German 10-year Bund rate, for example, has declined from 4¼ percent last June to current levels of 3½ percent. And spreads of yields on bonds issued by emerging-market nations over U.S. Treasury yields have declined to very low levels.

There is little doubt that, with the breakup of the Soviet Union and the integration of China and India into the global trading market, more of the world's productive capacity is being tapped to satisfy global demands for goods and services. Concurrently, greater integration of financial markets has meant that a larger share of the world's pool of savings is being deployed in cross-border financing of investment. The favorable inflation performance across a broad range of countries resulting from enlarged global goods, services, and financial capacity has doubtless contributed to expectations of lower inflation in the years ahead and lower inflation risk premiums. But none of this is new and hence it is difficult to attribute the long-term interest rate declines of the last 9 months to glacially increasing globalization. For the moment, the broadly unanticipated behavior of world bond markets remains a conundrum. Bond price movements may be a short-term aberration, but ! it will be some time before we are able to better judge the forces underlying recent experience.

This is but one of many uncertainties that will confront world policymakers. Over the past two decades, the industrial world has fended off two severe stock market corrections, a major financial crisis in developing nations, corporate scandals, and, of course, the tragedy of September 11, 2001. Yet overall economic activity experienced only modest difficulties. In the United States, only five quarters in the past 20 years exhibited declines in GDP, and those declines were small. Thus, it is not altogether unexpected or irrational that participants in the world marketplace would project more of the same going forward.

Yet history cautions that people experiencing long periods of relative stability are prone to excess. We must thus remain vigilant against complacency, especially since several important economic challenges confront policymakers in the years ahead.

Prominent among these challenges in the United States is the pressing need to maintain the flexibility of our economic and financial system. This will be essential if we are to address our current account deficit without significant disruption. Besides market pressures, which appear poised to stabilize and over the longer-run possibly to decrease the U.S. current account deficit and its attendant financing requirements, some forces in the domestic U.S. economy seem about to head in the same direction. Central to that adjustment must be an increase in net national saving. This serves to underscore the imperative to restore fiscal discipline.

Beyond the near-term, benefits promised to a burgeoning retirement-age population under mandatory entitlement programs, most notably Social Security and Medicare, threaten to strain the resources of the working-age population in the years ahead. Real progress on these issues will unavoidably entail many difficult choices. But the demographics are inexorable, and call for action before the leading edge of baby boomer retirement becomes evident in 2008. This is especially the case because longer-term problems, if not addressed, could begin to affect longer-dated debt issues, the value of which is based partly on expectations of developments many years in the future.

Another critical long-run economic challenge facing the United States is the need to ensure that our workforce is equipped with the requisite skills to compete effectively in an environment of rapid technological progress and global competition. Technological advance is continually altering the shape, nature, and complexity of our economic processes. But technology and, more recently, competition from abroad have grown to a point at which demand for the least-skilled workers in the United States and other developed countries is diminishing, placing downward pressure on their wages. These workers will need to acquire the skills required to compete effectively for the new jobs that our economy will create.

At the risk of some oversimplification, if the skill composition of our workforce meshed fully with the needs of our increasingly complex capital stock, wage-skill differentials would be stable, and percentage changes in wage rates would be the same for all job grades. But for the past 20 years, the supply of skilled, particularly highly skilled, workers has failed to keep up with a persistent rise in the demand for such skills. Conversely, the demand for lesser-skilled workers has declined, especially in response to growing international competition. The failure of our society to enhance the skills of a significant segment of our workforce has left a disproportionate share with lesser skills. The effect, of course, is to widen the wage gap between the skilled and the lesser skilled.

In a democratic society, such a stark bifurcation of wealth and income trends among large segments of the population can fuel resentment and political polarization. These social developments can lead to political clashes and misguided economic policies that work to the detriment of the economy and society as a whole. As I have noted on previous occasions, strengthening elementary and secondary schooling in the United States—especially in the core disciplines of math, science, and written and verbal communications—is one crucial element in avoiding such outcomes. We need to reduce the relative excess of lesser-skilled workers and enhance the number of skilled workers by expediting the acquisition of skills by all students, both through formal education and on-the-job training.

Although the long-run challenges confronting the U.S. economy are significant, I fully anticipate that they will ultimately be met and resolved. In recent decades our Nation has demonstrated remarkable resilience and flexibility when tested by events, and we have every reason to be confident that it will weather future challenges as well. For our part, the Federal Reserve will pursue its statutory objectives of price stability and maximum sustainable employment—the latter of which we have learned can best be achieved in the long-run by maintaining price stability. This is the surest contribution that the Federal Reserve can make in fostering the economic prosperity and well-being of our Nation and its people.

RESPONSE TO A WRITTEN QUESTION OF SENATOR BENNETT FROM ALAN GREENSPAN

Q.1. In 2002, the Home Mortgage Disclosure Act (HMDA) regulations were revised to allow for additional data collection from the lending industry. On March 1, 2005, banks and other covered lenders will be required to submit data to the Federal Reserve that will include more loan-pricing data and new ethnicity data. Concerns have been raised that this new HMDA data, if taken out of context, might allow for misinterpretation. Can you explain what the intent of the new HMDA data is, the context of the data, and what some of the key limitations of that data are, that is, what the data might show and might not show?

A.1. The new public disclosure of price information under HMDA is intended to ensure that the HMDA data set continues to be a useful tool to improve market efficiency and legal compliance with the fair lending laws. Since HMDA was last amended by the Congress, technological advances have made it possible for lenders to more accurately gauge credit risk. Lenders will lend to higher-risk individuals whom they previously would have denied credit, albeit at higher prices commensurate with the higher risk. Broader access to credit has been a largely positive development, expanding opportunities for homeownership and allowing previously credit-constrained individuals to tap the equity in their homes. However, expansion of the higher-priced lending market also has been associated with concerns about the fairness of pricing in the market.

The price data newly required to be disclosed under HMDA can be used as a screen that identifies aspects of the higher-priced end of the mortgage market that warrant a closer look. Conclusive judgments about the fairness of pricing, however, must consider all of the legitimate factors that underlie pricing decisions, including risk-related factors. Risk-related factors include measures such as the borrower's credit history and debt-to-income ratio, and the loan-to-value ratio of the specific transaction. The expanded HMDA data do not include these factors, or many others that are potentially relevant to a pricing decision. Absent information about all relevant pricing factors, one cannot draw definitive conclusions about whether particular lenders discriminate unlawfully or take unfair advantage of consumers. Thus, any price disparities by race or ethnicity revealed in the HMDA data will not, by themselves, prove unlawful discrimination. Such disparities will, however, need closer scrutiny. In the case of depository institutions, for example, that scrutiny will be supplied by bank examiners, who will have access to information about all of the relevant variables.

RESPONSE TO A WRITTEN QUESTION OF SENATOR SANTORUM FROM ALAN GREENSPAN

Q.1. The final version of Basel II was, as I understand, agreed to last summer. How final is the Accord? Are there issues that still need to be addressed? How will U.S. regulators work to mitigate possible negative competitive impacts of the Accord on U.S. banks? Particularly regarding the operational risk sector: (1) Could Pillar 1 treatment actually increase risk as more money goes to meet regulatory capital demands and less is therefore potentially available to apply to risk avoidance, and (2) Could there be increasing com-

petitive concerns for U.S. banks, particularly in business lines for which we are world leaders, such as credit cards and asset management? What is being done to ensure that we continue to maintain our leadership and are not competitively disadvantaged?

A.1. The participating countries in the Basel Committee on Banking Supervision reached an "Agreement in Principle" in mid-2004 and each country is now following its national procedures for review. As you know, in the United States, that procedure requires, among other things, a Notice of Proposed Rulemaking (NPR), followed by a comment period, the adoption of a final rule, and a delayed effective date. The U.S. banking agencies have made it clear to the Basel Committee that there is no final agreement until we once again have reviewed and evaluated public comments on our NPR. We published in 2003 an Advance Notice of Proposed Rulemaking (ANPR), reviewed comments on the ANPR, and we are now in the process of preparing an NPR that reflects those comments. The mid-2004 Basel II text issued by the Basel Committee followed several years of industry consultation in the late 1990's and early in the current decade, resulting in modifications to the proposal. The U.S. ban! king agencies expect to issue a final rule implementing Basel II in the United States in mid-2006 but every provision is still subject to public comment and review by the agencies.

The Basel Committee is still working on some important issues, at the request of the U.S. agencies, and under their leadership. These are (1) the capital rules for certain guaranteed obligations, where both the borrower and the guarantor would have to default (double default) before the lender faces losses, (2) issues involving capital charges for certain trading account assets, and (3) the development of measures of Loss Given Default under conditions of stress.

In the ANPR, the U.S. banking agencies proposed a bifurcated application of Basel II in the United States; that is, we proposed that certain large banks would be required to be under Basel II, any bank that meets the infrastructure requirements and wished to do so could opt in to Basel II, and all other banks would remain under the current Basel I-based capital rules. Federal Reserve staff has conducted and published several studies on the competitive implications of the proposed bifurcated application of Basel II in the United States. These studies were of mergers and acquisitions, loans to small- and medium-sized businesses, and operational risk. Early in April, Federal Reserve staff plans to release a residential mortgage study and before mid-year a consumer credit card study. The studies published so far suggest that the proposed U.S. implementation of Basel II would have at most modest competitive impacts, although the studies do indicate that there may be some po! tential effects on regional banks in the market for loans to small- and medium-sized firms. The U.S. banking agencies also have recently conducted their fourth Basel II quantitative impact study (QIS 4), and the results of this study (which should be available in the coming months) should shed additional light on the potential competitive impact of Basel II on the U.S. banking system.

The U.S. banking agencies have announced their intention to propose changes in either the application of Basel II in this country or in the current U.S. capital rules that would continue to apply

to non-Basel II banks in order to address potential competitive distortions, as well as to make the current capital regime more risk-sensitive. Proposed changes to the current capital rules would be included in an ANPR to be published shortly after the Basel II NPR.

Many banks that have been preparing for Pillar 1 treatment of operational risk, using the Advanced Measurement Approach (AMA), which allows banks great flexibility, continue to tell us that they perceive that the process has spawned risk management benefits for their organization that go beyond regulatory compliance. In addition, we as supervisors—and increasingly rating agencies and counterparties—believe that such mechanisms are necessary in well-managed organizations that seek to play a role in global financial markets, in extending credit, trading in large volume, and managing and processing financial assets for a significant share of the global financial system. In effect, the market—independently of Basel II—is requiring that banks establish and maintain an operational risk management infrastructure that is similar in nature and cost to the infrastructure that would be required under Basel II. Moreover, we do not expect that Basel II will impede banks' efforts to m! itigate their operational risk; in fact, Basel II allows banks to reduce substantially their capital requirements for operational risk to the extent the bank has taken action to control or hedge its operational risk.

U.S. banks would be stronger, safer, and less vulnerable to shock—and thus the preferred entities for global counterparties—*because* of having the strong risk measurement and management systems that Basel II requires. This proposition holds true in credit cards, asset management, and across the full range of bank activities. A bank is not competitively disadvantaged if it has strong risk and capital management systems vis-à-vis its rivals here and abroad. In any event, foreign rivals will be subject to the Basel II rules, and securities firms in this country will be subject to similar rules.

For use at 10:00 a.m., EST
Wednesday
February 16, 2005

Board of Governors of the Federal Reserve System

Monetary Policy Report to the Congress

February 16, 2005

Letter of Transmittal

BOARD OF GOVERNORS OF THE
FEDERAL RESERVE SYSTEM
Washington, D.C., February 16, 2005

THE PRESIDENT OF THE SENATE
THE SPEAKER OF THE HOUSE OF REPRESENTATIVES

The Board of Governors is pleased to submit its Monetary Policy Report to the Congress pursuant to section 2B of the Federal Reserve Act.

Sincerely,

Alan Greenspan, Chairman

Contents

Monetary Policy Report to the Congress

Report submitted to the Congress on February 16, 2005, pursuant to section 2B of the Federal Reserve Act

MONETARY POLICY AND THE ECONOMIC OUTLOOK

The year 2004 was marked by continued expansion in economic activity and appreciable gains in employment. With fiscal policy stimulative, monetary policy accommodative, and financial conditions favorable, household spending remained buoyant and businesses increased investment in capital equipment and inventories, despite the restraint imposed by sizable increases in oil prices. Labor market conditions improved significantly, albeit at an uneven pace, and productivity rose notably further. Consumer price inflation moved higher with the surge in energy prices, but core consumer price inflation (that is, excluding food and energy) remained well contained, and measures of expected inflation over longer horizons held steady or edged lower.

Although economic activity had increased substantially in 2003, the expansion nevertheless appeared somewhat tentative as 2004 opened, in large measure because businesses still seemed to be reluctant to boost hiring. Over the course of the spring, however, it became clearer that the expansion was solidifying. Businesses added appreciably to their payrolls, boosted investment in equipment and software, and started restocking inventories. While household spending growth softened somewhat, residential construction expanded rapidly. Rising energy prices boosted overall consumer price inflation, and core inflation moved up as well. In response to positive economic news and higher inflation during this period, market participants came to anticipate that monetary policy tightening would begin sooner than they had expected, and interest rates increased considerably. With the economic expansion more firmly established and slack in labor and product markets somewhat diminished, the Federal Open Market Committee (FOMC) at its June meeting began to reduce the substantial degree of monetary accommodation that was in place.

The gradual removal of monetary policy stimulus continued in the second half of the year as the economy expanded at a healthy clip on balance. Around midyear, some measures of growth in activity softened, partly because of the drain on income and the rise in business costs created by higher oil prices. The expansion of consumer spending slowed in the spring, and the pace of hiring and gains in industrial production dropped back notably during the summer. Equity prices and longer-term interest rates moved lower over this period as well. In the event, the slowdown in household spending growth proved short lived. Both hiring and increases in factory output stepped up again in the autumn, and these gains were extended early this year. With profits healthy and financial conditions still supportive, capital spending increased at a brisk pace throughout the year. Over the final quarter of 2004, short-term interest rates rose further as monetary policy was firmed at each FOMC meeting, but long-term interest rates were largely unchanged. Equity prices rose appreciably in the fourth quarter, and the dollar depreciated against most other major currencies. The FOMC increased the target federal funds rate 25 basis points again at its meeting this month, bringing the cumulative tightening over the past year to 1½ percentage points.

The fundamental factors underlying the continued strength of the economy last year should carry forward into 2005 and 2006, promoting both healthy expansion of activity and low inflation. Monetary policy is still accommodative, and financial conditions more generally continue to be advantageous for households and firms. Profits have been rising briskly, and corporate borrowing costs are low. Household net worth has increased with the continued sharp rise in the value of real estate assets as well as gains in equity prices, and this will likely help support consumer demand in the future. Absent a significant increase in oil prices from current levels, the drag from last year's run-up should wane this year. The lagged effects of the decline in the exchange value of the dollar since the autumn and sustained foreign economic growth are likely to boost the demand for U.S. exports. The prospects for the expansion of aggregate supply also appear to be quite favorable. Gains in structural labor productivity should continue, although not necessarily at the pace of recent years. Economic growth will likely be sufficient to generate notable increases in employment, although any reversal of the decline in labor force participation observed since 2001 would tend to hold up the unemployment rate. Core consumer price inflation has remained low since the larger increases posted in the early months of 2004, and long-term inflation expectations have been similarly well contained. With some slack likely remaining in labor and product markets at present and with the indirect effects of higher oil and import prices diminish-

ing, the prospects for inflation staying low are good. A favorable economic outcome is, of course, not assured, but at the most recent FOMC meeting the Committee again assessed the risks to both output and inflation as balanced. The Committee also reaffirmed that it is prepared to respond to events as necessary in its pursuit of price stability.

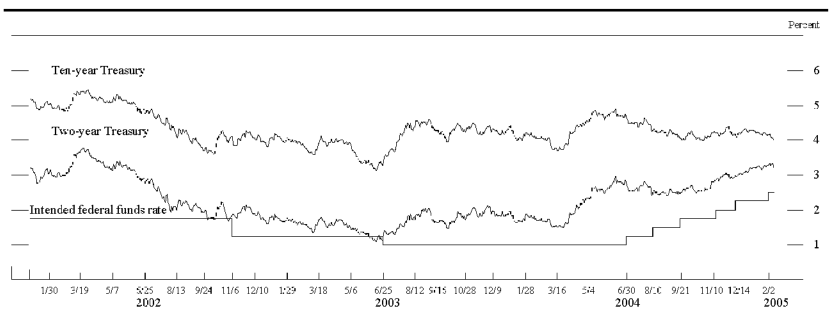
Monetary Policy, Financial Markets, and the Economy in 2004 and Early 2005

In early 2004, against the backdrop of stimulative fiscal and monetary policy, continued rapid growth in productivity, and supportive financial market conditions, business outlays appeared to be firming significantly and household spending remained strong. The FOMC became more confident that the economic expansion was likely gaining traction and that the risk of significant further disinflation had been greatly reduced. In these circumstances, it recognized that a highly accommodative stance for monetary policy could not be maintained indefinitely. Nonetheless, the Committee was concerned about the persistently slow pace of hiring and viewed underlying inflation pressures as likely to remain subdued. Accordingly, the Committee left its target for the federal funds rate unchanged at 1 percent at its January and March meetings. However, beginning in January, it modified the language of its policy statement to gain greater flexibility to tighten policy should circumstances warrant by indicating that monetary policy accommodation would eventually have to be removed. At the same time, the Committee suggested that it could be patient in undertaking such actions.

By the time of the May and June FOMC meetings, incoming economic data pointed to a broader and more firmly established expansion, with continued strength in housing markets and business fixed investment. Also, the employment reports for March, April, and May had indicated strong and widespread gains in private nonfarm payrolls, and previous reports for January and February were revised upward significantly. Overall consumer price inflation in the first quarter was faster than it had been a year earlier, and core inflation also increased, in part because of the indirect effects of higher energy prices. The Committee maintained its target for the federal funds rate at 1 percent in May, but on the basis of the evolving outlook for economic activity and prices, it revised its assessment of risks to indicate that the upside and downside risks for inflation had moved into balance. The Committee also stated that monetary policy accommodation could "be removed at a pace that is likely to be measured" to communicate its belief, given its economic outlook, that policy would probably soon need to move toward a more neutral stance, though probably not at a rapid pace. The Committee retained this language at the June meeting while raising its target for the federal funds rate from 1 percent to 1¼ percent and noting that it would "respond to changes in economic prospects as needed to fulfill its obligation to maintain price stability."

The information that the Committee had received by the time of its August meeting indicated that economic growth had softened somewhat earlier in the summer. Although the housing market had remained strong and business outlays had continued to be healthy, consumer spending growth had slowed significantly, and industrial production had begun to level off. Also, the June and July labor market reports revealed that employment growth

Selected interest rates



NOTE. The data are daily and extend through February 9, 2005. Treasury rates are constant-maturity yields based on the most actively traded securities. The dates on the horizontal axis are those of FOMC meetings.

SOURCE. Department of the Treasury and the Federal Reserve.

had slowed considerably. At the same time, core consumer price inflation had moderated in May and June even though sizable increases in food and energy prices continued. However, the Committee believed that the softness in economic activity was caused importantly by higher prices of imported oil and would prove short lived. With financial conditions remaining stimulative, the economy appeared poised to grow at a pace sufficient to trim slack in resource utilization. In that regard, given the unusually low level of the federal funds rate, especially relative to the level of inflation, policymakers noted that significant cumulative policy tightening would likely be needed to meet the Federal Reserve's long-run objectives of price stability and sustainable economic growth. The Committee's decision at the meeting to raise its target for the federal funds rate 25 basis points, to $1\frac{1}{2}$ percent, and to maintain its assessment of balanced risks with respect to sustainable growth and price stability was largely anticipated by financial markets. However, market participants revised up their expectations for the path of the federal funds rate, reportedly because the announcement conveyed a somewhat more optimistic outlook for the economy than many had anticipated.

By the time of the September FOMC meeting, available information suggested that the economy had regained momentum. Real consumer spending bounced back sharply in July after a weak second quarter, and incoming data on industrial production indicated a modest strengthening. Housing activity had increased further, and business outlays had picked up significantly in the second quarter. In addition, the labor market showed signs of improvement in August, as the unemployment rate edged down and nonfarm payrolls grew moderately. Core consumer price inflation slowed in June and July, and a decline in energy prices from record levels pushed down readings on headline inflation. Although the Committee acknowledged that higher oil prices had damped the pace of economic activity around midyear, it nonetheless saw the expansion as still on solid footing. Consequently, the Committee agreed to increase its target for the federal funds rate another 25 basis points, to $1\frac{3}{4}$ percent; to reiterate its view that the risks to price stability and to sustainable growth were balanced; and to repeat its indication that the removal of policy accommodation would likely proceed at a "measured" pace. The reaction in financial markets to the policy rate decision and the accompanying statement was muted.

The information in hand at the time of the November FOMC meeting generally suggested that the economy had continued to expand at a moderate rate despite the restraint that higher oil prices imparted to real incomes and consumer confidence. Consumer and business spending stayed firm, and the housing market remained buoyant. However, industrial production was about unchanged, and the news on job growth was uneven—lackluster increases in nonfarm payrolls in September were followed by robust expansion in October. Inflation measures were moderate, although up somewhat from one year earlier. On balance, the Committee saw the economy as growing at a pace that would reduce margins of slack in the utilization of resources. The Committee also judged that inflationary pressures would likely be well contained if monetary policy accommodation were gradually withdrawn. The Committee's decision to raise its target for the federal funds rate from $1\frac{3}{4}$ percent to 2 percent with minimal change in the language in the accompanying statement was largely anticipated by financial markets and elicited little reaction.

At its December meeting, the Committee viewed available information as continuing to indicate that the pace of the economic expansion was sufficient to further reduce the underutilization of resources, despite elevated oil prices. Consumer spending remained solid, investment spending was strong, and manufacturing production showed modest growth. Also, employment gains in October and November were consistent with gradual improvement in the labor market. Meanwhile, core inflation, while above the unusually low rates of late 2003, remained subdued. Accordingly, the Committee voted to raise its target for the federal funds rate 25 basis points, to $2\frac{1}{4}$ percent, and to retain the previous statement that the removal of policy accommodation would likely be "measured." Investors had largely anticipated the policy rate decision, but a few market participants had reportedly speculated that the Committee would signal increased concern about inflationary pressures. In the absence of any such signal, implied rates on near-dated futures contracts and longer-term Treasury yields declined a few basis points after the release of the December statement.

Also at its December meeting, the Committee considered an accelerated release of the minutes of FOMC meetings. The Committee's practice had been to publish the minutes for each meeting on the Thursday after the next scheduled meeting. The Committee believed that, because the minutes contain a more nuanced explanation of policy decisions than the statement released immediately after each meeting, publishing them on a timelier basis would help market participants interpret economic developments and thereby better anticipate the course of interest rates. Earlier release would also provide a context for the public remarks of individual FOMC members. It was also recognized, however, that financial markets might misinterpret the minutes at times and that earlier release might adversely affect the Committee's discussions and, perhaps, the minutes themselves. After weighing these considerations, the Committee voted unanimously to publish the FOMC minutes three weeks after the day of the policy decision.

The information that the Committee reviewed at its February 2005 meeting indicated that the economy had continued to expand at a steady pace. The labor market showed signs of further improvement, and consumer spending and the housing market remained robust. Industrial production accelerated, particularly at the end of 2004, and growth of business fixed investment was solid in the fourth quarter. Core inflation stayed moderate, and measures of inflation expectations remained well anchored. Given the solid economic expansion and limited price pressures, the Committee voted to continue its removal of policy accommodation by raising its target for the federal funds rate from 2¼ percent to 2½ percent and to essentially repeat the language of the December statement. Futures market quotes indicated that investors had already priced in a 25 basis point increase in the target federal funds rate at the meeting, and market participants reportedly expected no substantive changes to the accompanying statement. Accordingly, the reaction in financial markets to the announcement was minimal.

Economic Projections for 2005 and 2006

Federal Reserve policymakers expect the economy to expand moderately and inflation to remain low in 2005 and 2006.[1] The central tendency of the forecasts of real GDP growth made by the members of the Board of Governors and the Federal Reserve Bank presidents is 3¾ percent to 4 percent over the four quarters of 2005. The civilian unemployment rate is expected to average about 5¼ percent in the fourth quarter of 2005. For 2006, the policymakers project real GDP to increase about 3½ percent, and they expect the unemployment rate to edge down to between 5 percent and 5¼ percent. With regard to inflation, FOMC participants project that the chain-type price index for personal consumption expenditures excluding food and energy (core PCE) will increase between 1½ percent and 1¾ percent both this year and next—about the same as the 1.6 percent increase posted over 2004.

1. As a further step to enhance monetary policy communications, Federal Reserve policymakers will now provide economic projections for two years, rather than one, in the February Monetary Policy Report.

ECONOMIC AND FINANCIAL DEVELOPMENTS IN 2004 AND EARLY 2005

The economy proved to be sufficiently resilient to maintain solid growth and moderate core inflation in 2004 even as higher oil prices drained consumers' purchasing power and boosted firms' costs. Real GDP rose 3¾ percent last year after having increased 4½ percent in 2003. Activity was supported by continued robust advances in household spending. In addition, capital spending by businesses increased notably. Labor market conditions improved significantly, though at an uneven pace over the course of the year. Private payrolls, which turned up in late 2003, rose 170,000 per month last year, on average, and the unemployment rate declined below 5½ percent by year-end and to 5¼ percent in January 2005—the lowest rates since 2001.

Consumer price inflation was driven higher last year by the sharp rise in energy prices. Although core consumer price inflation moved up somewhat from unusually low levels recorded in 2003, it remained well contained. Price increases were restrained by continuing, though diminishing, slack in labor and product markets, which tended to offset the effects of higher energy and commodity prices, as well as the weaker dollar, on firms' overall costs. In addition, solid productivity gains implied that unit labor costs rose only modestly, even if up from the declines in the preceding two years. The decline in crude oil prices, on balance, since October points to some easing of cost pressures on firms from that source in the period ahead.

Several forces likely contributed to last year's impressive economic performance in the face of the sizable

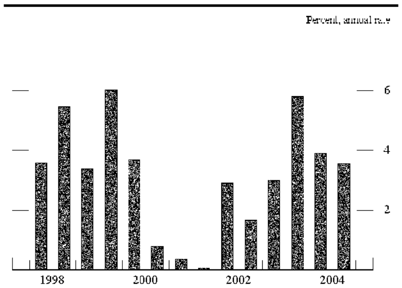
Economic projections for 2005 and 2006

Percent

Indicator	MEMO 2004 actual	Federal Reserve Governors and Reserve Bank presidents			
		2005		2006	
		Range	Central tendency	Range	Central tendency
Change, fourth quarter to fourth quarter[1]					
Nominal GDP	6.2	5–6	5¼–5¾	5–5¾	5–5½
Real GDP	3.7	3½–4	3¾–4	3¼–3¾	3½
PCE price index excluding food and energy	1.6	1½–2	1½–1¾	1½–2	1½–1¾
Average level, fourth quarter					
Civilian unemployment rate	5.4	5–5½	5¼	5–5¼	5–5¼

1. Change from average for fourth quarter of previous year to average for fourth quarter of year indicated.

Change in real GDP

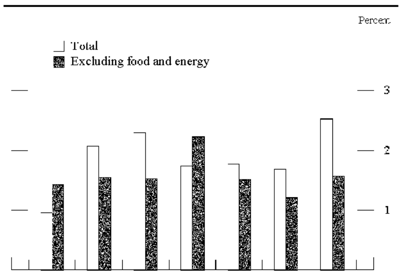


NOTE. Here and in subsequent charts, except as noted, change for a given period is measured to its final quarter from the final quarter of the preceding period.
SOURCE. Department of Commerce, Bureau of Economic Analysis.

adverse oil shock. The growth of real output continued to be undergirded by gains in structural labor productivity. Moreover, fiscal policy remained stimulative last year through the combination of the lagged effect of earlier cuts in personal tax rates, the rise in defense spending, and perhaps also the partial-expensing tax incentives for business investment. Monetary policy was highly accommodative in the early part of the year and remained accommodative, though progressively less so throughout the year, and credit remained readily available at favorable terms. Consumer demand was also boosted by the strong increases in asset values during the past two years.

Financial conditions remained stimulative last year even as market participants revised up their expectations for the near-term path of monetary policy. Interest rates on longer-term Treasury securities remained low, risk spreads on corporate bonds narrowed, and commercial banks eased terms and standards on business loans. In this environment, household debt again increased briskly. The borrowing needs of nonfinancial businesses were damped by their strong cash flows. Equity values rose, especially toward the end of the year. At the same time, the exchange value of the dollar declined, on net, over the year as market participants apparently focused on the financing implications of the large and growing U.S. current account deficit.

Change in PCE chain-type price index



NOTE. The data are for personal consumption expenditures (PCE).
SOURCE. Department of Commerce, Bureau of Economic Analysis.

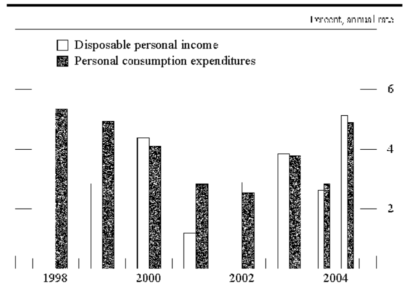
The Household Sector

Consumer Spending

Consumer spending grew substantially last year. Personal consumption expenditures (PCE) advanced nearly 4 percent in real terms, about the same as the increase in 2003. Sales of new motor vehicles remained brisk, on average, at 16¾ million units. Excluding motor vehicles, consumer spending on most categories of durable and nondurable goods rose rapidly, as gains in real expenditures for food and clothing both exceeded 5 percent; however, spending on computing equipment increased less in 2004 than in preceding years, and consumers responded to the high cost of gasoline and heating fuel by cutting back on real spending for these items. Real outlays for services also increased rapidly last year, and medical services posted especially large gains.

Real disposable personal income (DPI) rose nearly 4 percent last year, but this figure is exaggerated by Microsoft's $32 billion special dividend payment in December (the bulk of which is estimated to have accrued to U.S. households). If this one-time event is excluded from the calculation, real DPI rose only 2¾ percent in 2004, well below the increase posted in 2003. Faster job growth helped to support increases in

Change in real income and consumption



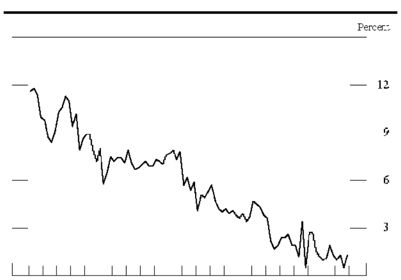
SOURCE. Department of Commerce, Bureau of Economic Analysis.

households' incomes last year in nominal terms, and the Jobs and Growth Tax Relief Reconciliation Act of 2003 (JGTRRA), which brought lower personal tax rates forward into 2003, led to larger refunds and smaller final payments in the spring of 2004. However, real income gains were held down, as higher oil prices siphoned off household purchasing power.

With the growth of real consumption spending outpacing that of real income through most of last year, the personal saving rate moved lower, from 1½ percent, on average, in 2003 to only ½ percent in the third quarter of last year. (The fourth-quarter surge in income associated with the Microsoft dividend payments pushed the saving rate back up to 1¼ percent, but this increase will likely be reversed early this year as dividend income falls back. Because the company's share price declined in step with the dividend payouts, the dividends had no effect on shareholders' overall financial resources and so probably had little effect on consumption.)

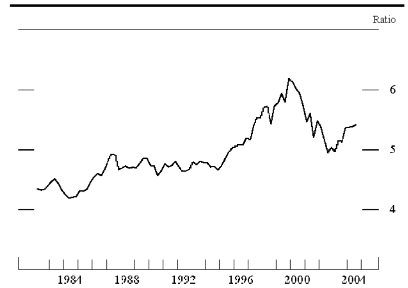
Low interest rates were one factor that helped to support consumption growth—especially for durable goods—despite comparatively slow gains in real income. Higher household wealth was also an important force that propelled consumer spending last year. According to the Federal Reserve's flow of funds accounts, the ratio of household net worth to disposable income rose sharply in 2003, as corporate equity values rebounded and home prices continued to rise. Moreover, although equity values were little changed, on net, through much of 2004 before rising notably in the final quarter, home prices continued to rise throughout the year, and the wealth-to-income ratio moved up further; by the third quarter (the most recent period for which the complete wealth data are available), the ratio had reversed nearly half its decline since the stock market peak in 2000. Because

Personal saving rate



NOTE. The data are quarterly and extend through 2004:Q4.
SOURCE. Department of Commerce, Bureau of Economic Analysis.

Wealth-to-income ratio

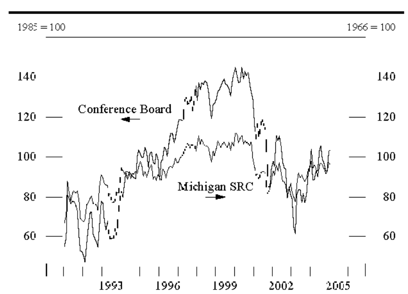


NOTE. The data are quarterly and extend through 2004:Q3. The wealth-to-income ratio is the ratio of household net worth to disposable personal income.
SOURCE. For net worth, Federal Reserve Board, flow of funds data; for income, Department of Commerce, Bureau of Economic Analysis.

wealth feeds through into household spending over a period of several quarters, the wealth increases in both 2003 and 2004 were important in supporting consumer spending last year. The rise in house prices, together with continued low interest rates, also led consumers to extract additional equity from their homes, in particular through home equity loans. Such actions provided many households with a readily available and relatively low-cost source of funds for financing consumption.

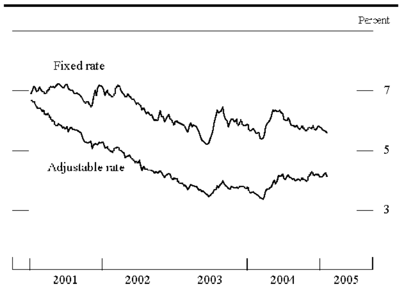
Consumer confidence, which had improved in 2003, remained at generally favorable levels last year, according to surveys by both the Michigan Survey Research Center (SRC) and the Conference Board. Confidence tended to dip at times during the year when energy prices were moving up most rapidly, but it recovered soon after those episodes.

Consumer sentiment



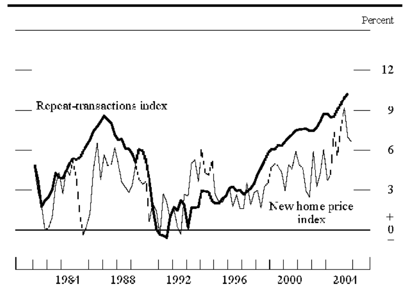
NOTE. The data are monthly and extend through January 2005.
SOURCE. The Conference Board and University of Michigan Survey Research Center.

Mortgage rates



NOTE. The data, which are weekly and extend through February 9, 2005, are contract rates on thirty-year mortgages.
SOURCE. Federal Home Loan Mortgage Corporation.

Change in house prices



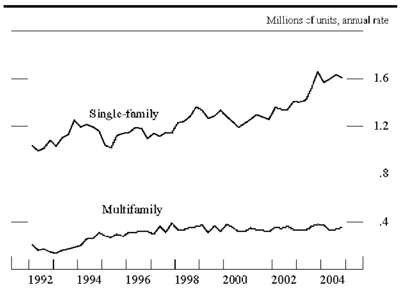
NOTE. The repeat-transactions index includes purchase transactions only and extends through 2004:Q3. The new home price index extends through 2004:Q4. Change is over four quarters.
SOURCE. For repeat transactions, Office of Federal Housing Enterprise Oversight; for new home prices, Department of Commerce, Bureau of the Census.

Residential Investment

Residential investment remained robust last year. Real expenditures increased $5\frac{3}{4}$ percent in 2004—the third straight year of strong gains. Demand for housing was influenced by the same factors that affected household spending more generally, but it was especially supported by nominal mortgage interest rates that have remained near their lowest levels since the late 1960s. Rates on thirty-year fixed-rate mortgages fluctuated between about $5\frac{1}{2}$ percent and $6\frac{1}{4}$ percent over the past two years; they edged up to the high end of that range during the spring but dropped back to under 6 percent by the end of summer and now stand below $5\frac{3}{4}$ percent.

In the single-family sector, housing starts amounted to 1.6 million units last year, a rate faster than the already rapid pace of 1.5 million units started in 2003. In the multifamily sector, starts totaled a solid 350,000 units last year, a figure in line with that of the preceding several years. Sales of both new and existing single-family homes hit new highs last year, and home prices moved up sharply. The repeat-transactions price index for existing homes (limited to purchase transactions only), which is published by the Office of Federal Housing Enterprise Oversight, climbed more than 10 percent over the four quarters ending in the third quarter of last year (the latest quarter for which data are available) and is up a cumulative 65 percent since 1997, when it started to rise notably more rapidly than overall inflation. These price increases have also outstripped by a wide margin the increases in household incomes and rents. Another nationwide price index, the Census Bureau's constant-quality price index for new homes, rose only $6\frac{3}{4}$ percent last year. Because this index does not adjust for the location of new homes within metropolitan areas, and because new homes constitute only a small fraction of the overall housing stock, this index is probably a less reliable indicator of overall home values than is the repeat-transactions index.

Private housing starts

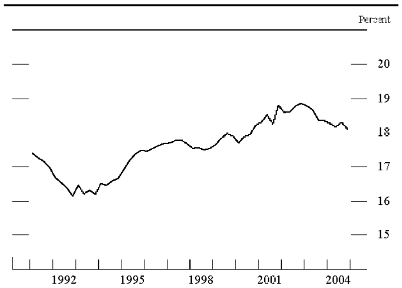


NOTE. The data are quarterly and extend through 2004:Q4.
SOURCE. Department of Commerce, Bureau of the Census.

Household Finance

Household debt is estimated to have increased about $9\frac{3}{4}$ percent in 2004, a touch less than in the previous year. Mortgage debt again paced this advance. The brisk expansion of mortgages reflected continued strong activity in housing markets and rising house prices. However, the growth rate of mortgage debt did not quite match that registered in 2003. Refinancing activity fell off

Household financial obligations ratio

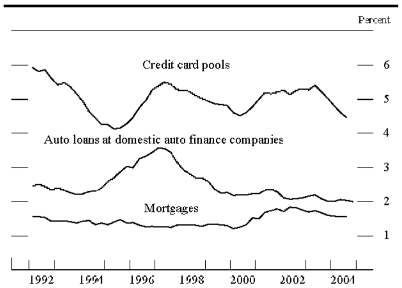


NOTE. The data are quarterly and extend through 2004:Q4. The final observation, 2004:Q4, is a projection. The financial obligations ratio equals the sum of required payments on mortgage and consumer debt, automobile leases, rent on tenant-occupied property, homeowners' insurance, and property taxes, all divided by disposable personal income.

sharply last year, as the pool of outstanding mortgages with interest rates above current market rates shrank considerably. Mortgages with adjustable interest rates, including hybrids that feature both fixed and adjustable interest rate components, were increasingly popular in 2004. Consumer credit continued to expand at a moderate pace by historical standards, restrained in part by the substitution of other forms of debt, such as home equity loans. Higher interest rates on some consumer loans and credit cards in the second half of 2004 may have also damped the growth of consumer credit.

Relatively low interest rates and further gains in disposable personal income limited pressures on household balance sheets in 2004. Measures of aggregate household financial obligations and debt service, which capture pre-committed expenditures relative to disposable income, were little changed last year, on balance, though they remained high by historical standards. Nevertheless, measures of household credit quality either held steady or improved during the course of the year. The latest available data indicate that delinquency rates on credit card loans, consumer loans, and residential mortgages at commercial banks declined, while those on auto loans at captive finance companies were about unchanged at a low level. Household bankruptcy filings ran below the elevated levels of 2003, although they stayed generally above the rates posted in earlier years.

Delinquency rates on selected types of household loans



NOTE. The data are quarterly. The rates for credit card pools and mortgages extend through 2004:Q3; the rate for auto loans extends through 2004:Q4.

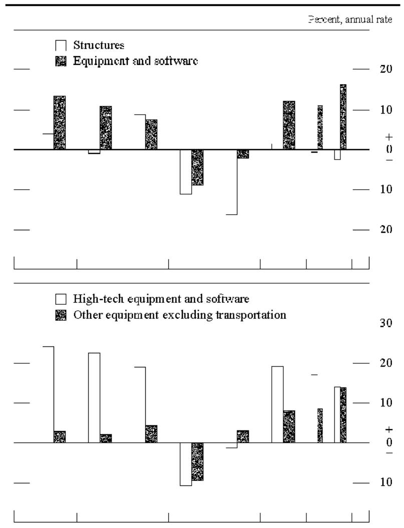
SOURCE. For credit cards, Moody's Investors Service; for auto loans, Big Three automakers; for mortgages, Mortgage Bankers Association.

The Business Sector

Fixed Investment

Business fixed investment rose robustly for a second consecutive year in 2004. Real spending on equipment and software (E&S) increased 13½ percent, about as much as in 2003, as firms' final sales continued to increase, profits and cash flow rose further, and many businesses

Change in real business fixed investment



NOTE. High-tech equipment consists of computers and peripheral equipment, software, and communications equipment.

SOURCE. Department of Commerce, Bureau of Economic Analysis.

reported a need to replace or upgrade existing equipment and software. Although many firms had little need to seek outside financing given their flush cash situation, those that did generally found financial markets to be receptive—interest rates remained low and other terms and conditions stayed relatively favorable. The partial-expensing tax incentives, which covered new equipment and software installed by the end of 2004, boosted profits and cash flow and may have also stimulated some investment spending.

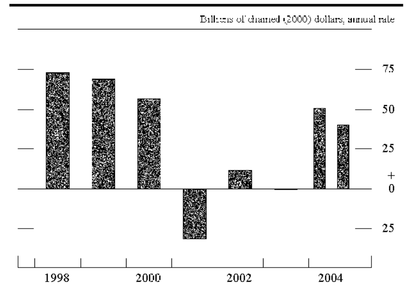
Increases in E&S spending were fairly widespread across categories of capital goods. Spending on high-technology equipment increased 15½ percent last year after having risen 19 percent in 2003; these gains followed two years of declines. Although the pattern of spending was uneven over the four quarters of 2004, for the year as a whole, business outlays for computing equipment rose 25 percent in real terms, while spending on software and communications equipment posted increases of 13 percent and 10 percent respectively. Outside of the high-tech sector, business spending on aircraft moved lower for the third consecutive year, as airlines continued to struggle with a highly competitive market environment and high fuel prices. In contrast, business outlays on motor vehicles rose substantially last year, with the demand for trucks exceptionally strong. Investment in equipment other than high-tech and transportation goods—a category that includes industrial machinery and a wide range of other types of equipment moved up 11 percent last year, the most in more than ten years.

In contrast to the rebound in equipment spending, real outlays in the nonresidential construction sector were about unchanged for a second year in 2004 and have yet to recover from their sharp downturn during 2001 and 2002. In the office sector, where construction increased rapidly in the late 1990s, spending has remained especially weak; vacancy rates for these properties, although down a touch over the past year, are still quite elevated. Construction of industrial buildings has also remained low as a result of high vacancy rates. In contrast, demand for new retail and wholesale properties has been firmer, reportedly a reflection of the steady increases in consumer spending, and outlays for these types of buildings moved higher last year. In addition, investment in the drilling and mining sector rose last year in response to high prices for natural gas.

Inventory Investment

Businesses added appreciably to inventories last year for the first time since running down their holdings sharply in 2001. As economic activity strengthened during 2002 and 2003, many businesses chose to operate with inventories that were increasingly lean relative to sales. In 2004, when stocks had become quite spare—even after taking into account the ongoing improvements in inventory management that have allowed firms to economize on stockholding—and businesses had apparently grown more confident in the durability of the recovery, businesses accumulated $45 billion of inventories (in real terms), according to preliminary data. The step-up in the pace of stockbuilding contributed about ¼ percentage point to GDP growth last year.

Change in real business inventories



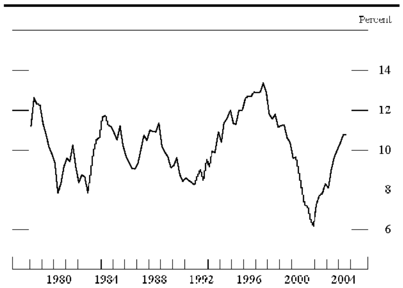
SOURCE. Department of Commerce, Bureau of Economic Analysis.

Corporate Profits and Business Finance

Strong growth of corporate profits again allowed many firms to finance capital spending with internal funds last year. As a result, nonfinancial business debt rose at only a moderate pace. Net equity issuance dropped further into negative territory in 2004, and on balance nonfinancial corporations are estimated to have raised no net funds in credit and equity markets. However, short-term business debt, including commercial paper and commercial and industrial (C&I) loans, expanded last year after three years of contraction, and commercial mortgage debt continued to increase rapidly. The credit quality of businesses remained strong.

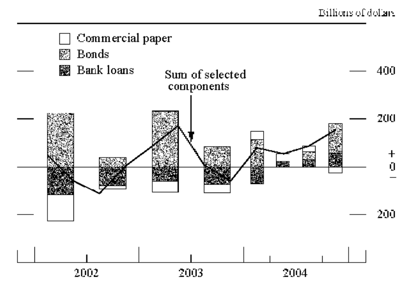
Corporate profits held up well in 2004 after surging in the previous year. The ratio of before-tax profits of nonfinancial corporations to that sector's gross value added increased for a second consecutive year. In the fourth quarter of 2004, operating earnings per share for S&P 500 firms were nearly 20 percent above their level four quarters earlier. Analysts' earnings forecasts began to moderate somewhat in the second half of 2004 after several months of strong upward revisions.

Before-tax profits of nonfinancial corporations
as a percent of sector GDP



NOTE. The data are quarterly and extend through 2004:Q3. Profits are from domestic operations of nonfinancial corporations, with inventory valuation and capital consumption adjustments.
SOURCE. Department of Commerce, Bureau of Economic Analysis.

Selected components of net business financing



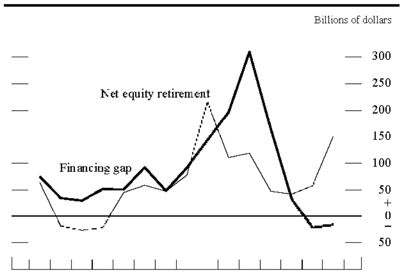
NOTE. Seasonally adjusted annual rate for nonfinancial corporate business. The data for the sum of selected components are quarterly. The data for 2004:Q4 are estimated.
SOURCE. Federal Financial Institutions Examination Council, Consolidated Reports of Condition and Income (Call Report).

In equity markets, net issuance of shares by nonfinancial firms turned more negative in 2004. Although initial public offerings rebounded from the sluggish pace of the past two years, ample profits and sizable cash holdings helped boost share retirements from mergers and repurchases.

Net corporate bond issuance was sluggish in 2004, as firms evidently relied heavily on their considerable profits to fund investment in fixed capital and inventories. The timing of gross bond issuance was influenced by interest rate movements during the year, as firms took advantage of occasional dips in longer-term yields to issue bonds. Firms reportedly used a large portion of the proceeds to pay down existing debt, although some companies used the funds raised in the bond market to repurchase equity shares or to finance mergers.

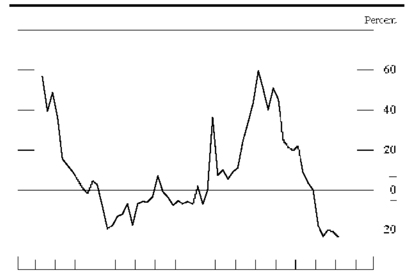
Short-term business borrowing revived in 2004 after a prolonged contraction. Commercial paper outstanding turned up in the first half of the year, although it flattened out over the second half. Business loans at banks rebounded over the course of last year. According to results from the Federal Reserve's Senior Loan Officer

Financing gap and net equity retirement
at nonfinancial corporations



NOTE. The data are annual; 2004 is based on partially estimated data. The financing gap is the difference between capital expenditures and internally generated funds. Net equity retirement is the difference between equity retired through share repurchases, domestic cash-financed mergers, or foreign takeovers of U.S. firms and equity issued in public or private markets, including funds invested by venture capital partnerships.

Net percentage of domestic banks tightening
standards on commercial and industrial loans
to large and medium-sized firms



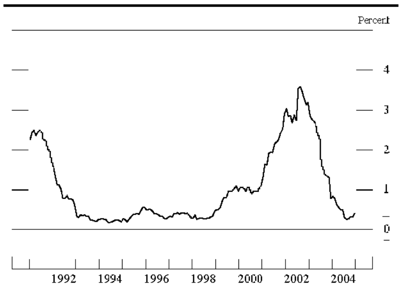
NOTE. The data are based on a survey generally conducted four times per year; the last reading is from the January 2005 survey. Large and medium-sized firms are those with annual sales of $50 million or more. Net percentage is the percentage reporting a tightening less the percentage reporting an easing.
SOURCE. Federal Reserve, Senior Loan Officer Opinion Survey on Bank Lending Practices.

Opinion Survey on Bank Lending Practices, commercial banks eased terms and standards on business loans during the course of 2004 in response to the improved economic outlook and to increased competition from other banks and nonbank lenders. Survey responses also indicated an increase in demand for C&I loans that reflected firms' need to fund rising accounts receivable, inventories, capital expenditures, and merger activity. Concerns over loan quality seemed to diminish further in 2004, as spreads on leveraged deals in the syndicated loan market edged down from already low levels.

Corporate credit quality remained solid in 2004 amid strong earnings, low interest rates, and a further buildup of already substantial cash positions on firms' balance sheets. The delinquency rate on C&I loans declined further, and the twelve-month trailing default rate on corporate bonds fell to historically low levels before edging up late in the year. Net upgrades of bonds by Moody's Investor Service for both investment- and speculative-grade nonfinancial firms increased last year.

The stock of commercial mortgage debt outstanding grew at a rapid pace in 2004. Some firms reportedly continued to find mortgages an attractive source of long-term funding. The expansion of commercial mortgage credit helped propel issuance of commercial-mortgage-backed securities (CMBS) to near-record levels. Delinquency rates on commercial mortgages on the books of banks and insurance companies remained low throughout the year, and those on loans backing mortgage securities fell. Considerable gains in commercial real estate prices increased owners' equity and largely kept pace with the sizable increase in mortgage debt obligations. Yield spreads of CMBS over comparable Treasury securities remained moderate.

Default rate on outstanding corporate bonds



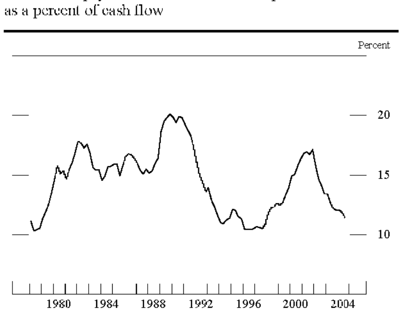
NOTE. The data are monthly and extend through December 2004. The rate for a given month is the face value of bonds that defaulted in the twelve months ending in that month divided by the face value of all bonds outstanding at the end of the calendar quarter immediately preceding the twelve-month period.
SOURCE. Moody's Investors Service.

The Government Sector

Federal Government

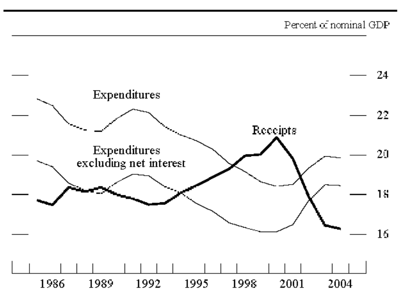
The federal budget position deteriorated slightly further in 2004, as spending increases and further tax reductions offset the effects of stronger economic growth on revenues. The unified budget deficit widened from $378 billion in fiscal 2003 to $412 billion in fiscal 2004. As a share of GDP, the federal unified deficit stood close to 3½ percent in both years. Receipts increased 5½ percent in fiscal 2004 after two years of declines. Corporate receipts surged more than 40 percent, or $58 billion, reflecting the improvement in corporate profits; individual tax receipts—restrained by JGTRRA, which pulled for-

Net interest payments of nonfinancial corporations as a percent of cash flow



NOTE. The data are quarterly and extend through 2004:Q3.
SOURCE. Department of Commerce, Bureau of Economic Analysis.

Federal receipts and expenditures



NOTE. The budget data are from the unified budget and are for fiscal years (October through September); GDP is for the year ending in Q3.
SOURCE. Office of Management and Budget.

ward reductions of personal tax rates that had been scheduled for the second half of the decade—rose only about 2 percent. Overall federal receipts increased less rapidly than nominal GDP, and the ratio of receipts to GDP edged down to 16¼ percent, the lowest level in more than forty years.

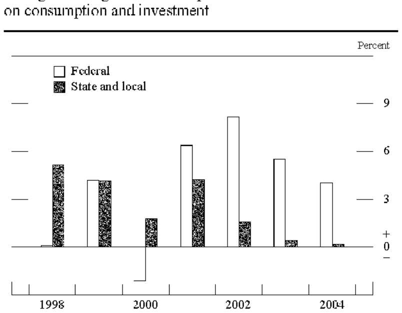
Meanwhile, nominal federal outlays increased about 6 percent in fiscal 2004. Spending for national defense increased especially sharply, but spending also increased notably for Medicare and Medicaid. Debt service costs, which fell sharply from 1997 through 2003 as a result of reduced debt and declining interest rates, edged higher last year. Federal government purchases of goods and services—the part of spending that is counted in GDP—rose about 4 percent in real terms in 2004 after larger increases in the preceding two years. (Government spending on items such as interest payments and transfers is excluded from GDP because these items do not constitute a direct purchase of final production.)

Regarding legislative initiatives, two new tax bills were enacted in the fall of 2004. First, the Working Families Tax Relief Act extended through 2010 a variety of personal tax reductions that had previously been set to expire earlier. Second, the American Jobs Creation Act replaced the exclusion of extraterritorial income (which the World Trade Organization had declared an illegal export subsidy) with numerous other tax reductions for domestic manufacturers and U.S. multinationals. The first bill is expected to have a ten-year budget cost of around $150 billion, while the second bill was scored as being revenue neutral. As for federal spending in fiscal 2005, the regular appropriations bills provided for sizable increases in spending on defense and homeland security and for modest increases in nondefense discretionary expenditures. In addition, emergency legislation passed in the autumn provided disaster aid for victims of hurricanes and for ranchers and farmers affected by drought conditions.

The recent sizable deficits in the unified budget mean that the federal government, which had been contributing to the pool of national saving from 1997 through 2000, has been drawing on that pool since 2001. Net federal saving—essentially the unified budget balance adjusted to the accounting practices of the national income and product accounts (NIPA)—dropped from positive 2 percent of GDP in 2000 to a level below negative 3 percent of GDP in 2003 and 2004. Personal saving moved lower over this period as well, while business net saving rose with the rebound in corporate profits. In all, net national saving edged up in 2004 but remained near its postwar lows. Because net national saving has fallen increasingly short of net domestic investment over the past several years, the inflow of foreign funds needed to finance that investment has risen. The growing inflow of foreign capital is mirrored in the widening of the nation's current account deficit. Over time, the low national saving rate could eventually slow the rise in living standards either by increasing the burden of servicing U.S. foreign debt or by impinging on domestic capital formation.

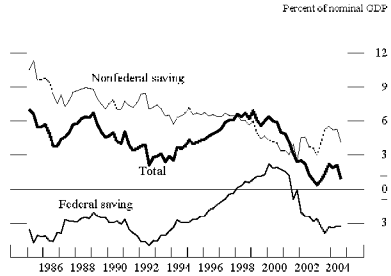
The growth rate of Treasury debt moderated slightly last year after increasing substantially in 2003. Nonetheless, federal debt held by the public as a percentage of GDP continued to edge higher over the course of 2004 and currently stands at about 36½ percent. To help finance substantial budget deficits, the Treasury issued a considerable volume of bills as well as two-, three-, five-, and ten-year nominal notes. In addition, the Treasury expanded its borrowing program in 2004 by adding semiannual auctions of twenty-year inflation-protected bonds and five-year inflation-protected notes.

Change in real government expenditures on consumption and investment



SOURCE. Department of Commerce, Bureau of Economic Analysis.

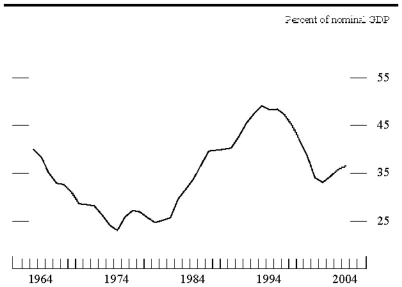
Net saving



NOTE. The data are quarterly and extend through 2004:Q3. Nonfederal saving is the sum of personal and net business saving and the net saving of state and local governments.

SOURCE. Department of Commerce, Bureau of Economic Analysis.

Federal government debt held by the public

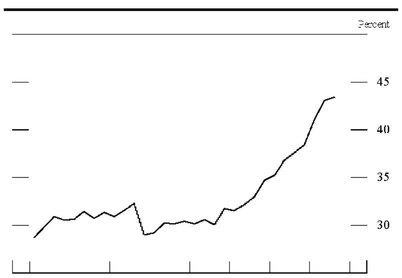


NOTE. Through 2003, the data for debt are year-end figures, and the corresponding value for GDP is for Q4 at an annual rate; the final observation is for 2004:Q3. Excludes securities held as investments of federal government accounts.

Various indicators suggested a continued strong appetite for Treasury securities among foreign investors last year. Indirect bidding at Treasury auctions, which includes bidding by the Federal Reserve Bank of New York on behalf of foreign official institutions, remained robust, and Treasury securities held in custody at the Federal Reserve Bank of New York on behalf of such institutions increased just over $200 billion in 2004. Also, data from the Treasury International Capital System showed a substantial increase in holdings of Treasury securities by foreign official and private investors, particularly those in Japan. The proportion of Treasury securities held by foreign investors is estimated to have risen to a record 43½ percent by the third quarter of 2004.

Treasury debt reached its statutory ceiling late last year. To cope with the constraint, the Treasury temporarily resorted to accounting devices, suspended issuance of state and local government series securities, and postponed a four-week bill auction. In mid-November, Congress raised the debt ceiling from $7.4 trillion to $8.1 trillion, and the Treasury subsequently resumed normal financing operations.

Treasury securities held by foreign investors
as a share of total outstanding



NOTE. The data are quarterly and extend through 2004:Q3.

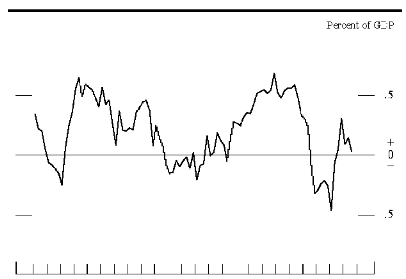
State and Local Governments

Pressures on the budgets of state and local governments have eased as economic activity has strengthened. Tax receipts have been spurred by the increases in household income, consumer spending, and property values. As a result, many states seem to be on track to meet balanced budget requirements in the current fiscal year (which ends June 30 for all but a few states) without using as much borrowing or other extraordinary measures as in recent years. Nevertheless, a number of states still must deal with lingering fiscal problems, particularly depleted reserve funds, the expiration of temporary tax hikes, and rising Medicaid costs. In addition, several states still face serious structural imbalances in their budgets.

Real expenditures by state and local governments as measured in the NIPAs remained about flat for a second year in 2004. Real spending on current operations rose less than 1 percent last year, while real investment spending declined. However, even as they were holding the line on spending increases, states and localities were able to resume net hiring in 2004 after having left employment about unchanged in 2003.

Net issuance of debt by state and local governments edged down from the rapid pace set in 2003, as improved budget positions permitted some contraction in short-term debt. Advance refunding offerings were again strong dur-

State and local government net saving



NOTE. The data, which are quarterly, are on a national income and product account basis and extend through 2004:Q3. Net saving excludes social insurance funds.

SOURCE. Department of Commerce, Bureau of Economic Analysis.

ing the year, as states and municipalities took advantage of low long-term interest rates and moderate credit spreads. Credit quality of tax-exempt borrowers improved in 2004. Rating upgrades of tax-exempt bonds outpaced downgrades, especially later in the year.

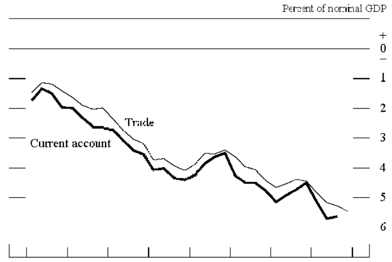
The External Sector

After narrowing in 2003, the U.S. current account deficit widened again last year and was $660 billion (annual rate), or 5.6 percent of GDP, in both the second and third quarters. Much of this widening reflected a considerable increase in the deficit on goods and services trade, as a marked rise in imports more than offset solid increases in exports. The trade deficit expanded from $500 billion during the fourth quarter of 2003 to more than $650 billion, on average, during the second half of 2004.

International Trade

Real exports of goods and services rose an estimated $5^1/_2$ percent in 2004 despite a deceleration in the fourth quarter. In the first half, exports were supported by the lagged effect of the fall in the dollar's value in 2003. Strong expansion of foreign economic activity also helped boost exports in the first half, but that stimulus diminished in the second half of the year when foreign growth slowed. For the year as a whole, exports of industrial supplies and capital goods posted solid growth. Exports to Canada, Mexico, and western Europe rose smartly in 2004, whereas exports to Japan were relatively weak. Real exports of services increased about $3^1/_2$ percent through 2004 as a whole.

U.S. trade and current account balances



NOTE. The data are quarterly. The trade data extend through 2004:Q4 and the current account data extend through 2004:Q3.
SOURCE. Department of Commerce.

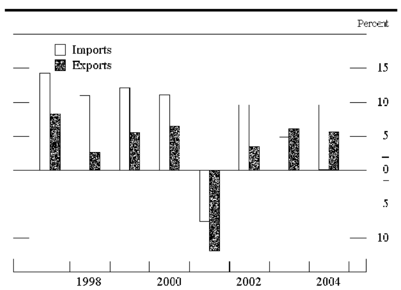
After increasing at an annual rate of almost 6 percent in the first half of 2004, prices of exported goods moved up at just a $2^1/_2$ percent rate in the second half. This deceleration was due in large part to a reversal of the run-up in the prices of agricultural products that had occurred in late 2003 and early 2004. Better harvests last year returned prices of agricultural products to levels near those that had prevailed before the spike.

Solid growth in income in the United States spurred growth of real imports of $9^1/_2$ percent in 2004. The increase primarily reflected higher imports of goods that occurred despite a notable rise in their prices. Real oil imports expanded almost 10 percent in 2004. Imports of capital equipment increased throughout the year, but imports of consumer goods suffered a period of weakness through the middle of the year before rebounding in the fourth quarter. Imports of services moved up only $1^3/_4$ percent in 2004.

Prices of imported non-oil goods increased at an annual rate of just over 4 percent in the first half of 2004, but the pace slowed to 2 percent in the second half. This step-down largely reflected a deceleration in the prices of industrial supplies, driven by a leveling off of nonfuel commodity prices at the elevated levels reached in March. Declines in the prices of foods offset continued price increases for metals.

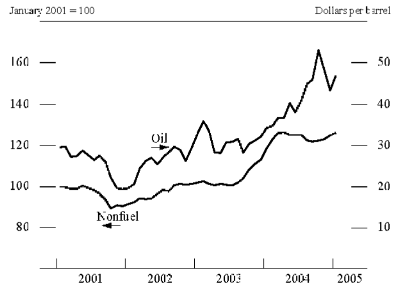
The spot price of West Texas intermediate (WTI) crude oil moved up during most of 2004 and surged temporarily to a record high of $55 per barrel in October. Since then, it has fluctuated somewhat below that peak but still at levels well above $33 per barrel, the price at which it started 2004. Oil prices were driven up by intensified concerns that oil supply would not keep pace with surprisingly strong global demand. Oil consumption in China grew nearly 15 percent in 2004, pushing that economy past Japan as the world's second-largest consumer. As oil prices rose, OPEC increased its oil production,

Change in real imports and exports of goods and services



SOURCE. Department of Commerce and Federal Reserve staff estimates.

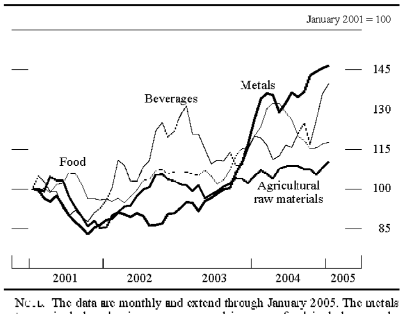
Prices of oil and of nonfuel commodities



NOTE. The data are monthly and extend through January 2005. The oil price is the spot price of West Texas intermediate crude oil. The price of nonfuel commodities is an index of forty-five primary-commodity prices.
SOURCE. For oil, *Wall Street Journal;* for nonfuel commodities, International Monetary Fund.

diminishing the cartel's estimated spare capacity to historically low levels. Increased OPEC production damped particularly the rise in prices of heavier, more sulfurous grades of crude oil but had less effect on prices of lighter grades like WTI. Supply disruptions also played a role in the run-up of oil prices. In October, Hurricane Ivan extensively damaged oil and gas production facilities in the Gulf of Mexico, boosting the price of WTI relative to other grades of crude oil. Sabotage of production and distribution facilities in Iraq hindered oil exports from that country, which remain below pre-war levels. In Nigeria, ethnic violence and community protests shut down some production. Russian oil output, however, continued despite the breakup of Yukos, formerly Russia's largest oil company. Late in the year, oil prices declined from their October highs, as production recovered in the Gulf of Mexico and OPEC added new capacity. The price of the far-dated NYMEX oil futures contract (currently for delivery in December 2011) rose about $10 per barrel during 2004, possibly reflecting expectations of greater oil demand in Asian emerging-market economies. The far-dated futures contract averaged about $38 per barrel in January 2005, while the spot price of WTI averaged about $48 per barrel.

Prices of major nonfuel commodities



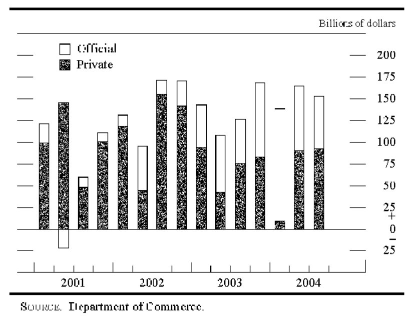
NOTE. The data are monthly and extend through January 2005. The metals category includes aluminum, copper, and iron ore; food includes cereals, vegetable oils and protein meals, seafood, and meat; agricultural raw materials consists of timber, cotton, wool, rubber, and hides; beverages consists of coffee, cocoa beans, and tea.
SOURCE. International Monetary Fund.

The Financial Account

In 2004, the U.S. current account deficit was financed once again largely by foreign purchases of U.S. bonds. Foreign official inflows picked up further last year and were especially strong in the first quarter, reflecting sizable bond purchases by Asian central banks. Private foreign purchases of U.S. bonds rebounded in 2004 from a slight decline in 2003, with especially large purchases coming late in the fourth quarter. In contrast, foreign demand for U.S. equities weakened further in 2004, although this also picked up late in the year. Net purchases of foreign securities by U.S. investors remained strong in 2004, with most of the strength coming in the second half of the year.

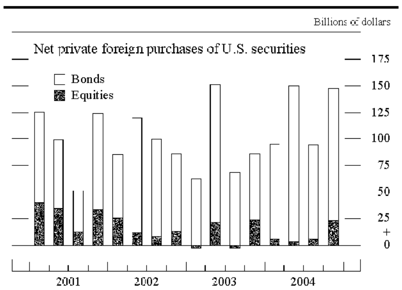
U.S. direct investment abroad continued at a strong pace, as reinvested earnings remained sizable. Direct investment into the United States rebounded in the first three quarters of 2004 from its anemic pace in 2003; global mergers and acquisitions revived, and reinvested earnings picked up. Overall, net direct investment outflows continued over the first three quarters of 2004 but at a lower pace than in 2003.

U.S. net financial inflows



SOURCE. Department of Commerce.

U.S. net international securities transactions



SOURCE. Department of Commerce and the Federal Reserve Bank of New York.

Net inflows of portfolio capital exceeded net outflows of direct investment and represented the financial counterpart to the U.S. current account deficit. These net financial inflows imply a further decline in the U.S. net international investment position, which began 2004 at a reported level of negative $2.4 trillion (22 percent of GDP).

The Labor Market

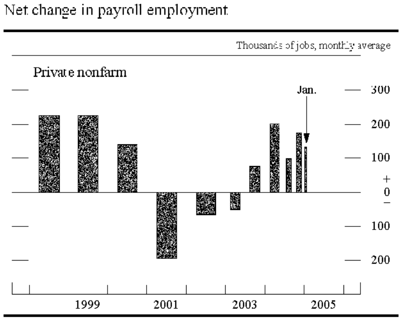
Employment and Unemployment

The labor market improved notably in 2004. Private payrolls, which began to post sustained increases in late 2003, rose an average of 170,000 per month last year. Progress was not steady over the course of the year, however. Employment growth stepped up sharply in the spring to a pace of almost 300,000 per month in March, April, and May; net hiring then dropped back to subpar rates of about 100,000 per month in June through September. In the four months since then, increases in private payrolls have averaged 165,000 per month.

The improved pace of hiring was widespread, as all major industry groups contributed to faster employment growth relative to that of the latter part of 2003. The largest gains were in professional and business services and health services. The construction sector also posted substantial gains. In the manufacturing sector—where employment had declined almost continuously since early 2000—payrolls increased in the spring when overall employment was rising sharply but were about unchanged, on net, over the second half of the year. Employment gains in retail trade and in food services were also brisk over the first half of the year but tapered off in the second half. Meanwhile, state and local governments added substantially to their payrolls last year, especially for education, but civilian employment in the federal government edged lower.

The unemployment rate fell from near 6 percent in late 2003 to less than 5½ percent by late last year; joblessness fell further in January 2005, to 5¼ percent. The decline in the unemployment rate over the past year reflected both the pickup in hiring and a labor force participation rate that remained surprisingly low. From 2001 through 2003, the participation rate declined by more than would have been predicted on the basis of past relationships with indicators of labor demand, and in 2004, when the pace of hiring increased, the participation rate leveled off but failed to rise. These considerations suggest that there may be a persistent component to the recent softness in participation. However, participation had been quite strong through 2000, when the labor market was extremely tight, and the fact that participation turned down

Net change in payroll employment

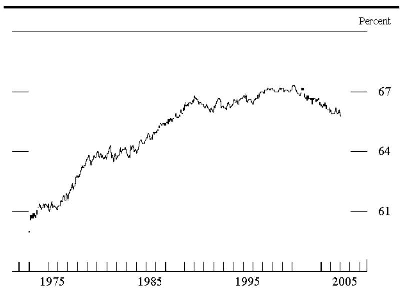


SOURCE. Department of Labor, Bureau of Labor Statistics.

Civilian unemployment rate

NOTE. The data are monthly and extend through January 2005.
SOURCE. Department of Labor, Bureau of Labor Statistics.

Labor force participation rate



NOTE. The data are monthly and extend through January 2005.
SOURCE. Department of Labor, Bureau of Labor Statistics.

at the same time that labor demand weakened suggests that at least some of the recent low participation is cyclical. To the extent that some of this low participation proves to be transitory, the resumption of more-rapid labor force growth will limit the speed at which employment gains further push down the unemployment rate.

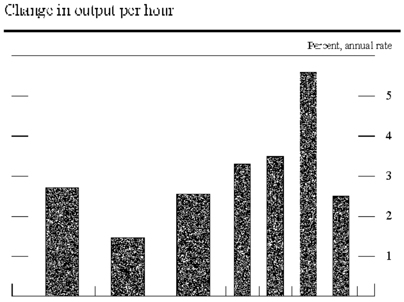
Productivity and Labor Costs

Labor productivity rose solidly again last year. Output per hour in the nonfarm business sector increased an estimated 2½ percent over the year. This increase was somewhat below the outsized 4 percent average pace of increase from 2001 through 2003. Those earlier huge productivity gains were not associated with especially large accumulations of new capital equipment, as had been the case during the late 1990s; instead, to a large degree, the gains seem to have been related to more effective use of capital equipment that had been acquired earlier and to one-time organizational innovations induced by firms' earlier reluctance to commit to increased hiring. Still, last year's 2½ percent increase in productivity was impressive by long-run standards: It was in line with the pace of the late 1990s and well above rates that had prevailed during the preceding two decades.

Increases in hourly labor compensation remained moderate last year. As measured by the employment cost index (ECI), which is based on a quarterly survey from the Bureau of Labor Statistics, hourly compensation in private nonfarm businesses increased 3¾ percent in 2004, a bit less than in 2003. An alternative measure is compensation per hour in the nonfarm business sector as derived from compensation data in the NIPAs. This measure of hourly compensation rose 3½ percent last year, an increase similar to that in the ECI but substantially less than the 5½ percent rise in 2003.

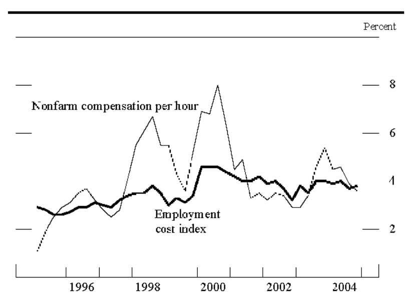
As has been the case for several years, the cost of employee benefits rose considerably more than did wages and salaries last year. The benefits component of the ECI increased nearly 7 percent, while the wages and salaries component posted a much more moderate 3 percent increase. The rise in hourly wages and salaries was about the same as increases in the preceding two years; although probably boosted by last year's higher rate of price inflation, wages were likely held down by the continued, though diminishing, labor market slack and also by employers' attempts to offset continued large increases in benefits costs. Health insurance costs continued to rise rapidly. As measured by the ECI, employers' costs of health insurance, which account for about 6 percent of

Change in output per hour



NOTE. Nonfarm business sector.
SOURCE. Department of Labor, Bureau of Labor Statistics.

Measures of change in hourly compensation



NOTE. The data are quarterly and extend through 2004:Q4. For nonfarm compensation, change is over four quarters; for the employment cost index (ECI), change is over the twelve months ending in the last month of each quarter. Nonfarm compensation is for the nonfarm business sector; the ECI is for private industry excluding farm and household workers.
SOURCE. Department of Labor, Bureau of Labor Statistics.

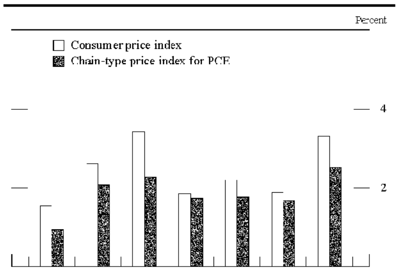
overall compensation costs, rose 7 percent last year after having increased more than 10 percent per year in 2002 and 2003.

Prices

Overall consumer prices rose notably more in 2004 than they did in 2003, and the sharp increase in energy prices accounted for much of the step-up. The chain-type price index for personal consumption expenditures (PCE) rose 2½ percent last year, compared with an increase of 1¾ percent in 2003. The increase in PCE prices excluding food and energy was considerably smaller—only 1½ percent, up a little more than ¼ percentage point from the increase in 2003. Inflation as measured by the market-based component of core PCE prices—which excludes a collection of erratic prices that are unobservable from market transactions and which the Bureau of Economic Analysis began to publish early last year was in line with overall core PCE inflation last year. The core consumer price index (CPI) rose about 2 percent last year after having increased 1¼ percent in 2003. (The CPI differs from PCE prices in a number of respects, but one factor that boosted CPI inflation relative to PCE inflation last year was a difference in the way the two indexes measure the prices of medical services, especially physicians' services, which rose much more rapidly in the CPI than in the PCE index.) The rise in core consumer prices was largest in the early months of 2004: Core PCE prices increased at an annual rate of nearly 2 percent over the first half of the year and then decelerated to a 1¼ percent rate of increase in the second half.

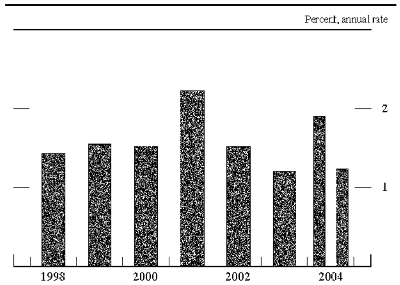
The price index for GDP was less affected by last year's rise in energy prices than was the PCE measure; much of

Change in consumer prices



SOURCE. For consumer price index, Department of Labor, Bureau of Labor Statistics; for chain-type measure, Department of Commerce, Bureau of Economic Analysis.

Change in PCE prices excluding food and energy



SOURCE. Department of Labor, Bureau of Labor Statistics.

the energy price increase was attributable to the higher prices of imported oil, which are excluded from GDP because they are not part of domestic production. GDP prices increased 2¼ percent last year, ½ percentage point faster than in 2003. In addition to the rise in PCE prices (excluding the influence of imported oil), GDP prices were affected by a sizable increase in construction prices for residential and nonresidential structures.

The jump in consumer energy prices in 2004 was driven by the run-up in crude oil prices. The prices of both gasoline and fuel oil increased approximately 30 percent over the year, and higher oil costs accounted for the bulk of the increase. Prices of natural gas, which can often substitute for fuel oil in the industrial sector, rose notably as well last year despite the restraining influence of ample inventories. Electricity prices, which tend to reflect fuel costs with a lag, also moved higher through most of the year but dropped back some near year-end.

Consumer food prices rose around 3 percent for a second consecutive year in 2004. Exports of beef dropped

Alternative measures of price change

Percent

Price measure	2002	2003	2004
Chain-type			
Gross domestic product	1.6	1.7	2.4
Gross domestic purchases	1.8	1.8	2.9
Personal consumption expenditures	1.8	1.7	2.5
Excluding food and energy	1.5	1.2	1.6
Market-based PCE excluding food and energy	1.4	1.0	1.6
Fixed-weight			
Consumer price index	2.2	1.9	3.4
Excluding food and energy	2.0	1.2	2.1

NOTE. Changes are based on quarterly averages of seasonally adjusted data.

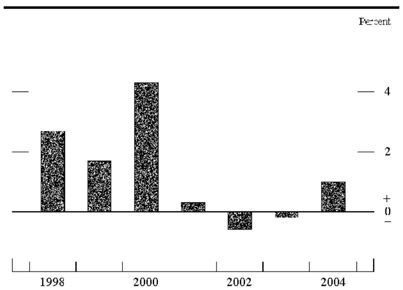
SOURCE. For chain-type measures, Department of Commerce, Bureau of Economic Analysis; for fixed-weight measures, Department of Labor, Bureau of Labor Statistics.

sharply last year when most of the largest importing countries placed restrictions on U.S. beef after a case of mad cow disease was discovered. Nevertheless, domestic demand was sufficiently strong to support consumer meat prices last year. Fruit and vegetable prices trended sideways through most of the year but then rose sharply in the fall because of crop damage associated with the series of hurricanes that hit the Southeast in August and September. In addition, prices for food away from home, which are driven more by labor costs than by raw food prices, increased more rapidly last year than in 2003.

Core consumer prices were influenced by a variety of forces last year. Price increases were likely restrained by continuing slack in labor markets and in some product markets, but businesses faced considerable pressure from several sources of increased costs. First, the indirect effects of the large jump in energy prices fed through to businesses throughout the economy and were especially important for firms in energy-intensive industries, such as those that produce plastics and fertilizers. Second, prices were up sharply for a number of other industrial commodities, including lumber and a variety of metals. These price increases reflected strengthening economic activity abroad as well as in the United States. Although these non-oil commodities represent a small part of businesses' overall costs, some businesses likely felt the pinch of sustained price increases in these areas. Third, the declining exchange value of the dollar boosted import prices, including those of many inputs to production. Finally, the deceleration in labor productivity boosted unit labor costs after two years of declines; nevertheless, last year's 1 percent rise in unit labor costs was quite modest.

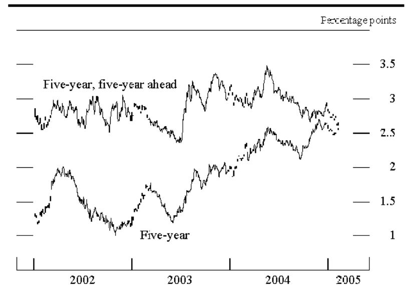
Taken together, these influences left their clearest mark on the prices of goods rather than services. Core goods prices were about unchanged, on average, last year, but this period of stability followed a period of unusually large

Change in unit labor costs



NOTE. Nonfarm business sector.
SOURCE. Department of Labor, Bureau of Labor Statistics.

TIPS-based inflation compensation



NOTE. The data are daily and extend through February 9, 2005. Based on a comparison of the yield curve for Treasury Inflation-Protected Securities (TIPS) to the nominal off-the-run Treasury yield curve.

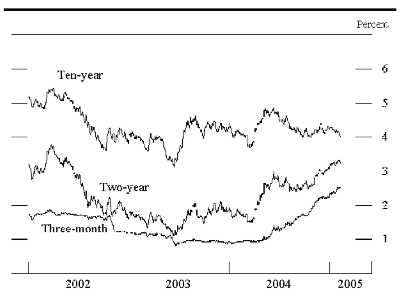
declines in 2003. In particular, the prices of new motor vehicles leveled off after falling notably in 2003, and the prices of used vehicles reversed some of their sharp 2003 declines. Prices of non-energy PCE services rose about 2 percent in 2004—a smaller increase than in 2003.

Last year's rise in inflation showed through to short-term measures of expected inflation, but longer-term measures remained stable. According to the Michigan SRC, households' median expectations for inflation over the next year moved up considerably in the spring as inflation was rising, but then they eased back and ended the year near 3 percent—up from around 2½ percent in late 2003. In contrast, the median expectation for inflation over the next five to ten years held about steady near 2¾ percent throughout this period. Inflation compensation as measured by spreads between yields on nominal Treasury securities and inflation-indexed securities—another indicator of expected inflation, albeit one that is also influenced by perceptions of inflation risk and perhaps also by the development of the market for inflation-indexed debt—showed a similar pattern. Inflation compensation over the next five years moved up about ½ percentage point during 2004, to 2½ percent, while compensation at the five- to ten-year horizon edged lower, on net, over the year.

U.S. Financial Markets

Domestic financial conditions were supportive of economic growth in 2004. Interest rates on longer-term Treasury securities remained low, corporate risk spreads fell, and stock prices, on balance, registered gains. These developments occurred even as market participants revised up their expectations for the path of the federal funds rate. At the beginning of 2004, futures market quotes

Interest rates on selected Treasury securities



NOTE. The data are daily and extend through February 9, 2005.
SOURCE. Department of the Treasury.

implied that investors expected a 1¾ percent target for the federal funds rate at year-end, 50 basis points below the target actually established at the FOMC meeting in December 2004. Consistent with the revision in policy expectations, yields on two-year Treasury notes increased about 1½ percentage points in 2004. Yields on longer-dated Treasury securities, however, ended the year essentially unchanged. Despite the run-up in oil prices, equity prices registered solid gains in 2004 after rising sharply the year before. Risk spreads on investment-grade corporate debt declined a touch, and those on speculative-grade debt fell more noticeably. Moreover, banks appreciably eased terms and standards for lending to businesses.

Interest Rates

Most market interest rates rose, on balance, over the first half of 2004, particularly at shorter maturities. The FOMC's decision at its January meeting to shift from a statement that monetary policy could remain accommodative for "a considerable period" to an indication that it could be "patient" in removing policy accommodation prompted a rise in market interest rates. In early February and March, yields fell substantially in response to employment reports that indicated tepid job growth. Prices of federal funds and Eurodollar futures contracts implied that investors placed only small odds on an increase in the target funds rate before late 2004 and that they envisioned only moderate monetary policy tightening thereafter. Longer-term interest rates and the expected path for the federal funds rate were considerably marked up later in the spring in response to data suggesting a pickup in aggregate demand and hiring, readings on core inflation that came in above expectations, and rising oil prices. In the statement released after its May meeting, the Committee indicated that policy accommodation was likely to be removed at a "measured" pace. At its June meeting, the Committee raised the target for the federal funds rate from 1 percent to 1¼ percent, but it continued to assess the risks to sustainable growth and to price stability as balanced and reiterated the "measured pace" language. Interest rates across the term structure declined somewhat immediately after the announcement, reportedly because some market participants had expected the FOMC to mention upside risks to growth or inflation in its statement.

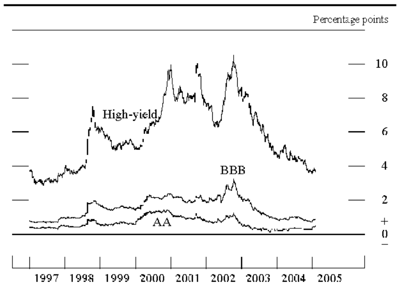
Chairman Greenspan's congressional testimony in July on monetary policy, which suggested that recent softness in consumer spending would likely prove short lived, sparked a jump in yields on Treasury securities. However, interest rates subsequently moved lower, on balance, as incoming data pointed to weaker spending and employment than investors had expected as well as to more-subdued core inflation. Apart from the August employment report, which seemed to hint that the economy was emerging from its "soft patch," incoming economic news remained somewhat lackluster through the end of the third quarter. However, investors reportedly viewed FOMC statements and comments by FOMC officials as more sanguine on near-term prospects for the economy than they had expected. In particular, the release of the minutes from the August FOMC meeting, which referenced the probable need for "significant cumulative tightening," prompted investors to mark up their expectations for the near-term path of monetary policy.

Short-term Treasury yields rose a bit further over the fall in association with actual and expected policy tightening, but long-term Treasury yields were little changed on net. Investors' expectations for the path of monetary policy firmed a bit more in the fourth quarter in response to higher-than-anticipated inflation and remarks from Federal Reserve officials that were reportedly interpreted as suggesting that an imminent pause in the tightening cycle was unlikely.

As the economic expansion gathered momentum and measures of corporate credit quality improved, investors' perception of risk seemed to diminish, and their willingness to bear risk apparently increased. Risk spreads on investment-grade corporate debt over comparable Treasuries ended the year slightly below their levels at the end of 2003. Spreads of speculative-grade yields declined further after narrowing sharply during 2003.

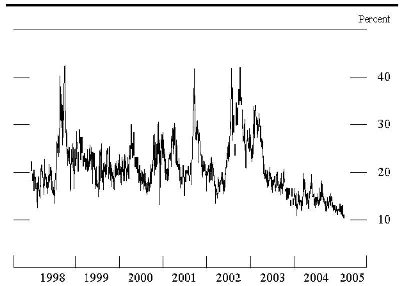
In early 2005, market participants boosted their expectations for the path of the federal funds rate, partly in response to the publication of the minutes of the December FOMC meeting, which investors reportedly interpreted as pointing to greater concerns about infla-

Spreads of corporate bond yields over comparable off-the-run Treasury yields



NOTE. The data are daily and extend through February 9, 2005. The high-yield index is compared with the five-year Treasury yield, and the BBB and AA indexes are compared with the ten-year Treasury yield.
SOURCE. Merrill Lynch AA and BBB indexes and Merrill Lynch Master II high-yield index.

Implied S&P 500 volatility



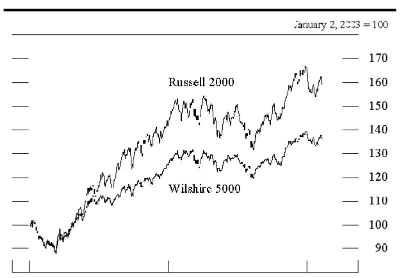
NOTE. The data are daily and extend through February 9, 2005. The series shown is the implied thirty-day volatility of the S&P 500 stock price index as calculated from a weighted average of options prices.
SOURCE. Chicago Board Options Exchange.

tion than had been expected. Short- and intermediate-term Treasury yields rose along with expectations for the path of monetary policy, but longer-term yields edged lower. Yields on investment- and speculative-grade corporate bonds largely moved with those on comparable Treasury securities, and hence risk spreads remained at low levels.

Equity Markets

After surging as much as 30 percent in 2003, broad stock market indexes climbed modestly over the first half of 2004. The boost to equity prices from robust earnings reports and analysts' upward revisions for future profits during this period was offset in part by rising interest rates

Stock price indexes



NOTE. The data are daily and extend through February 9, 2005.

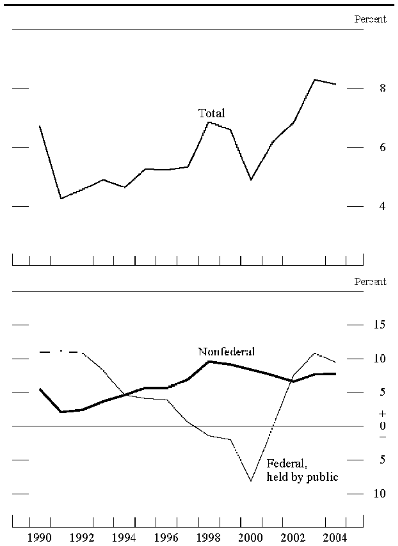
in the second quarter, worries about geopolitical developments, and sharply higher oil prices. Stock prices dipped early in the second half in response to softer economic data, further concerns about energy prices, and guidance from corporations that pointed to a less optimistic trajectory for earnings than investors had reportedly been expecting. However, as oil prices pulled back toward the end of 2004 and news on the economy improved, stock prices rebounded to post solid gains for the year. The increases were led by stocks with comparatively small market capitalizations; the Russell 2000 index climbed 17 percent in 2004 to a record high. The S&P 500 and the technology-laden Nasdaq advanced about 9 percent and $8\frac{1}{2}$ percent respectively. To date in 2005, equity prices have edged lower, on balance, as investors have responded to a rebound in oil prices, lackluster earnings reports, cautious guidance for future profits, and indications of continued monetary policy tightening.

Expected volatility implied by options prices for both the Nasdaq 100 and the S&P 500 declined further in 2004 from already low levels. The difference between the earnings–price ratio and the real ten-year Treasury yield—a crude measure of the premium investors require for holding equity shares—changed little, on balance, remaining close to its average value over the past two decades but above its level during the late 1990s.

Debt, Bank Credit, and M2

The aggregate debt of domestic nonfinancial sectors is estimated to have increased about $7\frac{3}{4}$ percent in 2004,

Growth of domestic nonfinancial debt



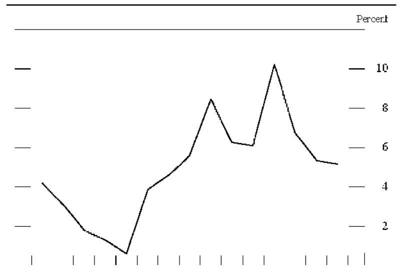
Note. For 2004, change is from 2003:Q4 to 2004:Q3 at an annual rate. For earlier years, the data are annual and are computed by dividing the annual flow for a given year by the level at the end of the preceding year. The total consists of nonfederal debt and federal debt held by the public. Nonfederal debt consists of the outstanding credit market debt of state and local governments, households, nonprofit organizations, and nonfinancial businesses. Federal debt held by the public excludes securities held as investments of federal government accounts.

somewhat faster than nominal income but a bit slower than the pace set the year before. Household and federal debt expanded rapidly. Borrowing by nonfinancial businesses was moderate, although it picked up in the fourth quarter.

Commercial bank credit rose about 9 percent in 2004, a larger advance than in the previous year. Expansion of mortgage and home equity loans on banks' books remained strong, as activity in the housing market stayed robust while mortgage originations shifted somewhat toward adjustable-rate products. After several years of runoffs, business loans began to grow in the second quarter of the year. According to survey evidence, commercial banks eased terms and standards on business loans as the economic outlook improved and competition from other banks and nonbank lenders intensified. Also, banks reported a pickup in demand for business loans that was said to be driven by customers' needs to fund rising accounts receivable, inventories, capital expenditures, and mergers. After adjusting for certain reclassifications of securities as loans, the growth of consumer loans on banks' books remained sluggish. Despite reports of increased competition among banks and nonbank intermediaries, bank profits were again strong in 2004. Banks experienced further improvements in asset quality and, as a result, reduced their provisions for loan losses.

M2 grew at a pace roughly in line with that of nominal GDP during the first half of 2004. A resurgence of mortgage refinancing spurred by the first-quarter decline in mortgage rates likely boosted liquid deposit growth, as proceeds from refinancing were temporarily held in deposit accounts pending disbursement to the holders of mortgage-backed securities. M2 growth slowed in the second half of the year in response to a drop in mortgage refinancing activity and the increased opportunity cost of holding M2 assets, as returns available on market instruments rose more than those on M2 components. For example, yields on retail money market mutual funds moved up more slowly than did short-term market interest rates, and assets of money funds accordingly continued to shrink. Small time deposits, which had contracted over the previous three years, resumed expansion in the second half of the year, as their yields began to rise in association with the increase in other market rates. Currency grew at its slowest rate since 2000, apparently reflecting sluggish demand by both domestic and foreign holders. On balance, M2 growth from the fourth quarter of 2003 to the fourth quarter of 2004 was about 5¼ percent. The velocity of M2 rose 1 percent, on net, roughly in line with the historical relationships among money, income, and opportunity cost.

M2 growth rate



Note. The data are annual and extend through 2004. M2 consists of currency, traveler's checks, demand deposits, other checkable deposits, savings deposits (including money market deposit accounts), small-denomination time deposits, and balances in retail money market funds.

International Developments

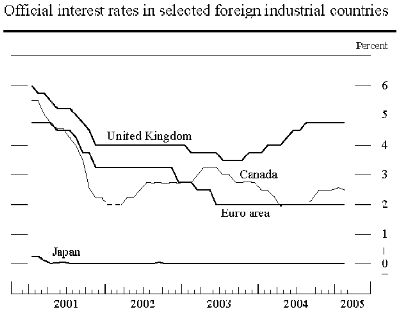
Foreign economic activity expanded in 2004 at a faster pace than in the preceding three years. The pickup in growth was widespread—global manufacturing and trade rebounded across industrial and emerging economies, in part because of strong demand from the United States and China. In the second half of the year, trade and foreign GDP growth slowed, partly as a result of higher oil prices and the appreciation of some foreign currencies against the dollar. The run-up in oil prices and other commodity prices contributed to higher, though still moderate, inflation across industrial and emerging economies.

Monetary policy in many foreign economies tightened over the course of 2004. Citing high rates of capacity utilization and mounting inflationary pressures, the Bank of England raised its target interest rate 100 basis points but has been on hold since August amid signs that housing prices and consumer spending are cooling. After cutting official interest rates earlier in the year, the Bank of Canada raised rates in the fall in response to diminishing slack in the economy. The Bank of Mexico tightened policy throughout the year to resist rising inflation, and Chinese authorities made monetary policy more restrictive to rein in soaring investment demand. In the euro area and Japan, central banks kept policy interest rates unchanged in 2004.

Foreign equity price indexes recorded moderate net gains last year after larger increases in 2003. Equity markets started the year strong, but prices declined in the spring as interest rates rose. The run-up in oil prices between July and October appeared to weigh on foreign equity prices, but the subsequent decline in oil prices helped support a rise in equity prices late in the year. Foreign long-term interest rates declined, on net, during 2004. Rates rose in the second quarter as new data (including reports from the United States) that showed faster growth and higher inflation led market participants to expect more-aggressive monetary tightening. However, foreign long-term interest rates slipped after midyear, when foreign growth slowed and foreign currencies appreciated against the dollar. Over the first half of the year, spreads on internationally issued sovereign debt of emerging-market economies over U.S. Treasuries moved up somewhat from low levels, but spreads more than reversed those increases in the second half.

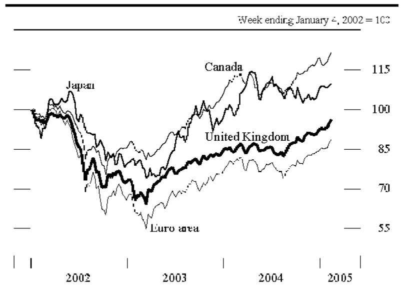
The path of the exchange rate was uneven over the course of 2004. The dollar rose slightly in the first half of

Official interest rates in selected foreign industrial countries



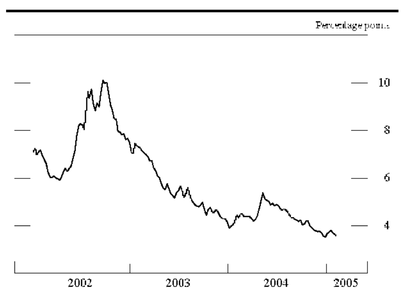
NOTE. The data are as of month-end; the last observation for each series is the average of trading days through February 9, 2005. The data shown are the call money rate for Japan, the overnight rate for Canada, the refinancing rate for the euro area, and the repurchase rate for the United Kingdom.

Equity indexes in selected foreign industrial countries



NOTE. The data are weekly. The last observation for each series is the average of trading days through February 9, 2005.
SOURCE. Bloomberg L.P.

Spread on internationally issued sovereign debt of emerging-market economies



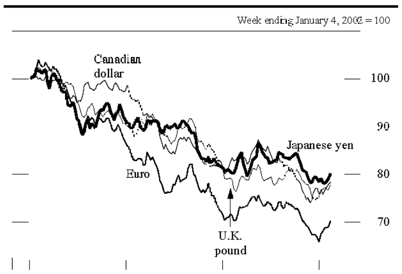
NOTE. The data are weekly averages. The last observation is the average of trading days through February 9, 2005. The series shown is the spread of the yield of certain dollar-denominated sovereign debt instruments of emerging-market economies over U.S. Treasury securities; over the period shown, the index encompassed nineteen countries.
SOURCE. J.P. Morgan Emerging Market Bond Index Plus (EMBI+).

U.S. dollar nominal exchange rate, broad index

NOTE. The data are monthly and are in foreign currency units per dollar. The last observation is the average of trading days through February 9, 2005. The broad index is a weighted average of the foreign exchange values of the U.S. dollar against the currencies of a large group of major U.S. trading partners. The index weights, which change over time, are derived from U.S. export shares and from U.S. and foreign import shares.

the year on perceptions that monetary policy would tighten more quickly in the United States than abroad. Beginning in September, however, the dollar resumed the depreciation that had started in 2002, as market participants focused on the financing implications of the large and growing U.S. current account deficit. In 2004, the dollar depreciated about 7 percent, on net, against the euro, the U.K. pound, and the Canadian dollar. The dollar declined 4 percent, on net, against the Japanese yen and 13 percent against the Korean won, but some other Asian central banks, most notably the People's Bank of China, kept their currencies stable against the dollar. So far in 2005, the dollar has rebounded, with market commentary focusing on the positive differential between U.S. economic growth and that in Europe and Japan.

U.S. dollar exchange rate against selected major currencies



NOTE. The data are weekly and are in foreign currency units per dollar. The last observation for each series is the average of trading days through February 9, 2005.

SOURCE. Bloomberg L.P.

Industrial Economies

After increasing strongly in the first quarter, Japanese GDP growth stagnated in the remainder of 2004. Growth in exports and business investment slowed over the year, and government investment contracted. However, corporate profits and balance sheets improved, and labor market conditions also brightened, with the job-offers-to-applicants ratio rising to a twelve-year high. Consumer prices continued to decline in 2004, though only slightly. In contrast, higher commodity prices helped push twelve-month wholesale price inflation up to 2 percent late in the year, its highest rate since 1990. The yield on the ten-year bellwether government bond rose from its June 2003 record low of about 1/2 percent to nearly 2 percent in mid-year before retreating to about 1 1/2 percent recently. After making substantial sales of yen for dollars in the first quarter, Japanese authorities ceased intervention in mid-March and remained on the sidelines even as the yen appreciated significantly against the dollar in the fall.

Economic conditions in the euro area firmed during the first half of 2004 but weakened in the second half. Private consumption and investment spending continued to rise, but export growth slowed after midyear. German GDP growth slowed to a crawl in the second half, as German consumer spending remained anemic, held down by a weak labor market and low consumer confidence. In contrast, French GDP growth was strong in the fourth quarter. The euro-area unemployment rate has been near 9 percent since rising to that level in early 2003. Inflation for the euro area remained just above the European Central Bank's medium-term goal of less than, but close to, 2 percent.

With the exception of a slowdown in the third quarter, economic expansion in the United Kingdom stayed strong during 2004, largely because of the brisk growth of consumption and government spending. Labor markets remained tight in 2004; the unemployment rate ticked down to its lowest level in almost three decades, and labor earnings posted solid gains. Consumer price inflation over the twelve months ending in December was 1 1/2 percent, below the central bank's official target rate of 2 percent. Housing price rises slowed sharply from rapid rates and were muted during the second half of 2004. Household net mortgage borrowing declined to a level 20 percent below its 2003 peak.

The Canadian economy expanded at a healthy pace throughout 2004. Sizable gains in consumption and investment boosted output throughout the year. Export growth, supported by demand from the United States, was

strong in the first half of the year but stagnated in the second half as U.S. manufacturing growth slowed and the Canadian dollar's appreciation hurt Canadian trade. The unemployment rate declined moderately over the year, and employment posted strong gains. Consumer price inflation has settled at about 2 percent, the midpoint of the Bank of Canada's inflation target range, whereas inflation excluding food, energy, and indirect taxes declined to around 1 1/2 percent by year-end.

Emerging-Market Economies

Growth of real GDP in China remained very robust in 2004, supported by strong domestic demand and exports. The Chinese government took steps early in the year to slow investment spending, curbing investment approvals and lending. Investment growth slowed significantly but remained rapid. At the same time, indicators of personal consumption spending strengthened, and Chinese exports and imports continued to soar in 2004. Consumer price inflation peaked at a twelve-month change of more than 5 percent in July but has fallen since then to less than 3 percent, as food prices have moderated. Inflation excluding food is only about 1 percent.

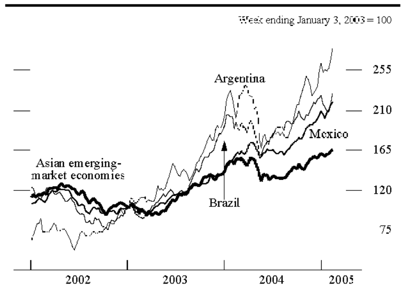
Supported by exports to China, economic growth in other Asian emerging-market economies was generally strong in 2004. Economic expansion in Korea remained heavily dependent on external demand because high levels of consumer debt continued to weigh on consumption spending. Inflation across emerging Asia, though still moderate, was pushed up by higher energy prices and strong aggregate demand.

The Mexican economy grew rapidly in the first half of the year in response to strong demand from the United States. In the third quarter, Mexican GDP growth slowed somewhat, as manufacturing exports stagnated, but domestic demand remained buoyant. Increases in energy and food prices pushed up twelve-month consumer price inflation to more than 5 percent, above the Bank of Mexico's target range of 2 percent to 4 percent. Monetary policy tightened throughout the year, and inflation began to fall near year-end. Oil revenues boosted the Mexican public-sector fiscal surplus and allowed Mexican government spending to provide stimulus while still meeting fiscal targets.

In Brazil, economic activity continued to expand robustly in 2004. Domestic demand was supported by the monetary loosening that occurred in the second half of 2003 and early 2004. Export growth was boosted by demand for commodities and the recovery in Argentina. Brazilian asset prices declined through May on expectations that higher global interest rates would make it more difficult for the Brazilian government to finance its debt, but stock prices have moved up sharply since May, and the currency has appreciated. Concerns over inflation pressures have prompted the central bank to tighten monetary policy since September.

In Argentina, the economic recovery picked up steam last year, as exports were supported by strong demand for commodities. The country continues, however, to grapple with difficult structural problems. After more than three years in default, the government launched a debt swap in January with the goal of restructuring more than $80 billion in defaulted bonds.

Equity indexes in selected emerging-market economies



NOTE. The data are weekly. The last observation for each series is the average of trading days through February 9, 2005. The Asian emerging-market economies are China, Hong Kong, India, Indonesia, Malaysia, Pakistan, the Philippines, Singapore, South Korea, Taiwan, and Thailand; the index weight for each of these economies is its market capitalization as a share of the group's total.

SOURCE. For Argentina, Brazil, Mexico, Bloomberg L.P.; for Asian emerging-market economies, Morgan Stanley Capital International (MSCI) index.